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ABSTRACT

Designed for teachers, this guide provides recommendations regarding identification, interventions, and follow-through procedures for working with students with attention deficit hyperactivity disorder (ADHD) in a classroom setting. Chapter 1 discusses the identification of children with ADHD and includes information on the definition of ADHD, characteristics of ADHD, and the responsibilities of the teacher and the teacher assistant team. Chapter 2 addresses assessment of children with ADHD, including the responsibilities of each of the members of the assessment team. In Chapter 3, excerpted information is provided on interventions for adapting general education classrooms, and a table provides examples of ways to accommodate the needs of children with ADHD. Material is also provided on medical interventions. The final chapter discusses follow-through. Each of the chapters closes with questions and answers on the covered topic, and a flowchart illustrates recommended procedures for the educational assessment and treatment of children with ADHD. Appendices include a federal policy bulletin on ADHD, a description of requirements under relevant federal laws, diagnostic criteria for ADHD, teaching strategies for ADHD, information on the assessment of students with ADHD, general information for parents and teachers, myths and facts about ADHD, and a resource directory. (Contains 16 references.) (CR)

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Technical Assistance Resource Guide
for Teachers Educating Students with:
Attention Deficit Hyperactivity Disorder

Idaho State Department of Education
Special Education Section
Nolene Weaver, Supervisor

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We would also like to thank Margie Strong for editing and formatting this manual.

PREFACE

This Technical Assistance Resource Guide is intended to be an information document providing suggestions for interventions and resources for working with students with ADHD in a classroom setting. **This guide is not a legal document, an implementation guide, or a set of standards for providing services to students with ADHD.** Please use this guide as a resource--you may copy any or all parts of this document without obtaining permission from the State Department of Education.

Please refer to the requirements under Section 504 of the Vocational Rehabilitation Act of 1973, and the Individuals with Disabilities Education Act (IDEA) for answers to specific questions about required federal procedures for students with disabilities. Information is also available in the September 16, 1991, memorandum issued by the U.S. Department of Education that clarifies policy regarding the needs of children with ADHD within general and special education (See Appendix A).

It is hoped that this Technical Assistance Resource Guide will be a valuable resource to those interested in providing educational services to children with ADHD. This guide was adapted from the ADHD Handbook that was published by the Special Education Section, Office of the Superintendent of Public Instruction, State of Washington.

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INTRODUCTION

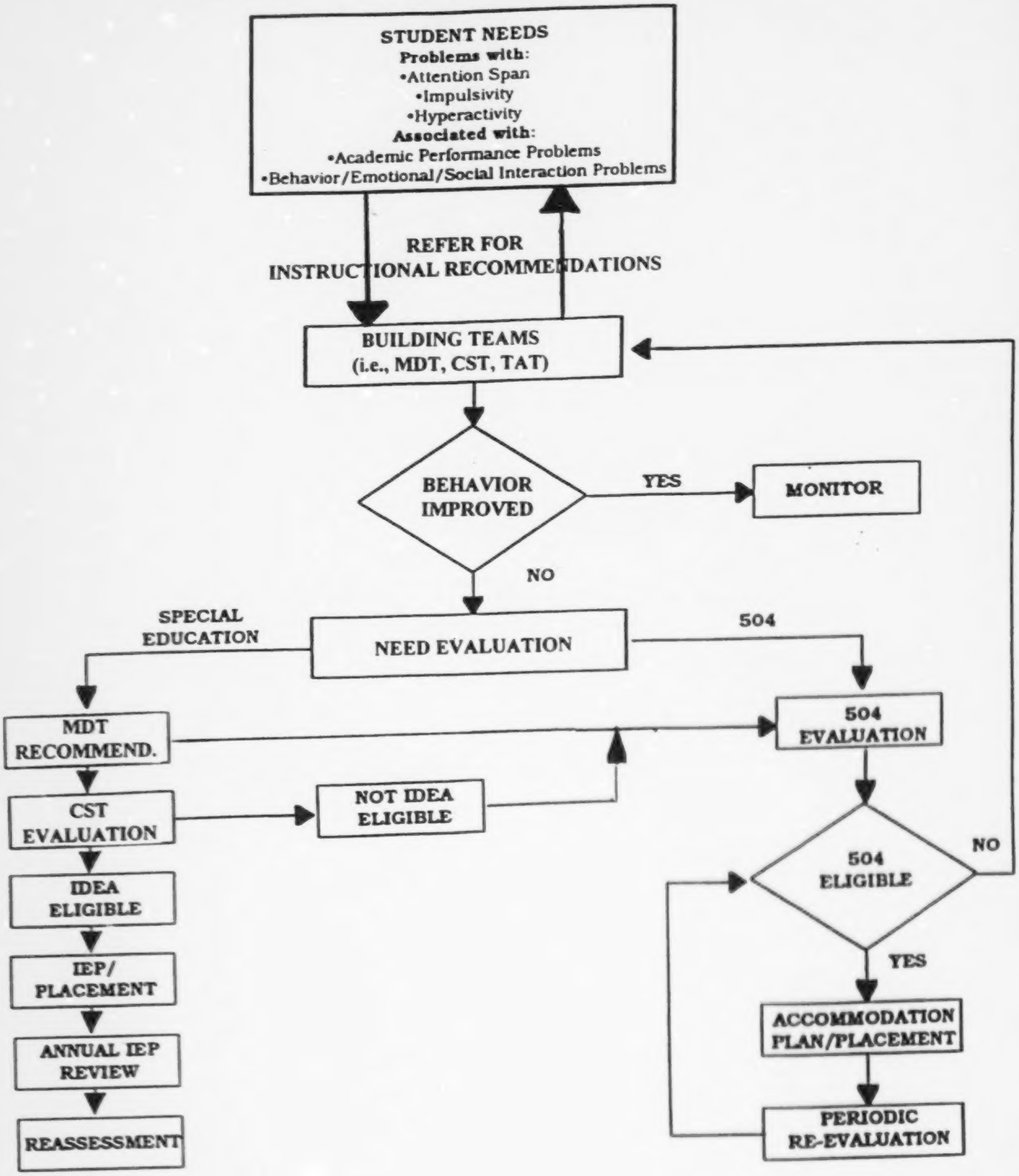
Children with ADHD can experience significant learning problems and difficulty in school. While there are varying estimates of the prevalence of ADHD, the United States Department of Education suggests that three to five percent of school-aged children have significant educational problems as a result of this condition. The purpose of this guide is to provide recommendations to teachers regarding identification, interventions, and follow-through procedures to more effectively meet the education needs of children with ADHD.

The term **ADHD** will be used to include children with **any** attention deficit disorder. This is consistent with the diagnostic category to be used in the newest version of the *Diagnostic and Statistical Manual for Mental Disorders* (*DSM-IV*), the standard clinical reference for the mental health field. (See Appendix A for the DSM-IV Criteria for Attention Deficit Hyperactivity Disorder.)

A joint memorandum was issued by the Office of Special Education and Rehabilitative Services, the Office for Civil Rights, and the Office of Elementary and Secondary Education, United States Department of Education, on September 16, 1991. The purpose of this memorandum was to clarify policy--including local school districts' legal responsibility--to address the educational needs of children with ADHD. (See Appendix B for the Federal ADHD Policy Memorandum.)

Figure 1 is a flowchart of recommended procedures for the educational assessment and treatment of children with ADHD. These procedures are discussed under the Identification, Intervention, and Follow-through sections of this handbook.

ADHD EDUCATIONAL ASSESSMENT PROTOCOL



IDENTIFICATION

Definition

Both the terminology and diagnostic criteria identifying the group of children with ADHD have undergone numerous revisions over the years. The *Diagnostic and Statistical Manual for Mental Disorders* (*DSM-IV*) terms the overall diagnostic category as Attention Deficit Hyperactivity Disorder (ADHD) with three subtypes: Attention-Deficit/Hyperactivity Disorder, Predominantly Inattentive Type; Attention-Deficit/Hyperactivity Disorder, Predominantly Hyperactive-Impulsive Type; and Attention-Deficit/Hyperactivity Disorder, Combined Type. Within this framework, the criteria identified in Appendix A must be met in order to warrant consideration of a clinical diagnosis of ADHD. Students with attention problems may potentially be served under Section 504 or under one of three IDEA categories:

- Learning Disabled (LD)
- Other Health Impaired (OHI)
- Seriously Emotionally Disturbed (SED)

All three categories require a Child Study Team (CST) to make the determination. If, after doing other assessments, the MDT feels the student may have ADHD, a physician needs to be involved in the medical diagnosis.

Barkley (1990) developed a "consensus"definition of ADHD:

> "Attention Deficit Hyperactivity Disorder is a developmental disorder characterized by inappropriate degrees of inattention, overactivity, and impulsivity. These often arise in early childhood; are relatively chronic in nature; and are not readily accounted for on the basis of gross neurological, sensory, language, motor impairment, mental retardation, or severe emotional disturbance. These difficulties are typically associated with deficits in rule-governed behavior and in maintaining a consistent pattern of work performance over time."

Seven Characteristics of ADHD

These characteristics incorporate seven elements defined by the Michigan Department of Education (1993):

1. Rather than being an acquired disorder, ADHD is considered to be a developmental disorder in which certain characteristics will be demonstrated at each developmental level.

2. Through the developmental levels, there are inappropriate degrees of (a) inattention, (b) overactivity, and/or (c) impulsivity.

3. Age of onset is prior to seven years.

4. As a developmental disorder, ADHD is relatively chronic in nature.

5. ADHD cannot be due to conditions such as gross neurological, sensory, language, motor impairment, mental retardation, or severe emotional disturbance. It may co-exist with other conditions.

6. Limitations in compliance with rules tend to exist for these children, due to factors such as forgetting rules and/or consequences, self-management of behavior, and issues surrounding sustained attention.

7. Work performance is often inconsistent over time and setting, and may be due to such factors as cognitive fatigue, attention/concentration issues, task stimulation level, time of day, resultant consequences, and task/setting novelty.

Identification Process

Specific criteria must be met for identification as ADHD, as reflected in the *DSM-IV*. Implied in these criteria is that substantial differences in behavioral characteristics may be present and educational needs/programming may vary. Identification processes should be conducted on a case-by-case, collaborative basis. The process of ADHD identification is founded on multiple data sources.

Any child suspected of having ADHD and **requiring specially designed instruction** or services under Section 504 of the Rehabilitation Act of 1973 (see the flow chart on page 2) must be evaluated to determine the child's eligibility and need for special education services. **To be eligible under IDEA, the ADHD condition has to adversely affect educational performance.** Children with ADHD, who are not eligible for special education are afforded all the rights and protections of Section 504 of the Rehabilitation Act of 1973.

Student Needs

While specific behaviors vary considerably, the most common school-based indicators of ADHD are problems with attention span, impulsivity, and hyperactivity. These problems are often associated with academic performance problems and behavioral/emotional and social interaction problems.

Inattention/Disorganization

- Often fails to finish things
- Often does not seem to listen
- Easily distracted
- Difficulty concentrating
- Difficulty organizing work
- Needs a lot of supervision
- Frequently shifts activities

Motor Hyperactivity/Impulsivity

- Excessive running and climbing
- Excessive fidgeting
- Difficulty staying seated
- Motor restlessness
- Always on the go
- Often acts before thinking
- Frequently calls out in class
- Difficulty waiting turn

Associated Issues

- Academic underachievement
- Problematic peer relationships
- Low self-esteem
- Conduct problems
- Low self-esteem
- Negative interactions with parents
- Negative interactions with teachers

Frick and Lahey (1991)

Teacher Responsibility

When the behaviors of impulsivity, inattention, and hyperactivity interfere with the student's performance in the general education classroom, the teacher would use reasonable strategies to assist the student. The teacher should also contact the parent(s). Then the teacher would typically use strategies to address the normal range of needs in the general education classroom, such as change of placement in the room, use of reinforcement systems (self-monitoring slips, student goal setting, etc.) or cooperative learning procedures.

Teacher Assistance Team

The Teacher Assistance Team, if available, is a site-based peer support and problem-solving group, which might consist of only general education staff. Membership might include a combination of some or all the following: principal, school psychologist, school nurse, school counselor, and teachers. The Team will discuss and define the student's problems and make recommendations to the teacher. The student's progress should be assessed and reported to the Team. **If at any time the student is suspected of having a disability that substantially limits a major life activity (not receiving meaningful educational benefit) Section 504 procedures must be implemented. If the student is suspected of having a disability and may need special education and related services, IDEA procedures must be implemented.**

Further Evaluation

If the student's behavior has improved, interventions should be continued, and the student's progress should be monitored. If the student's behavior has not improved, the need for further evaluation should be determined. In making this determination and in conducting any subsequent evaluation, all legal requirements of IDEA and Section 504 must be observed. These include protection during evaluation procedures, as well as the right to prior written notice and informed consent. (Refer to IDEA, and Section 504 for specific procedural requirements.)

Student Evaluation

Once a decision has been made that further evaluation is necessary, a case manager/team leader will be named and an evaluation plan developed. The plan should include the evaluation procedures, instruments to be used, and who will conduct the information. Parents are notified in writing, and written consent must be obtained prior to evaluating the student.

The student's multidisciplinary screening team evaluates the student and obtains data that documents the student's school performance and makes the determination for evaluation in the following areas:

- work habits and study skills;
- academic skills;
- emotional and social interactions;
- response to interventions;
- past school records and previous school problems;
- group and individual test results;
- standardized behavior rating scale results; and
- classroom observation results.

If the student is being evaluated because of a suspected IDEA disability condition and possible need for special education and related services, all appropriate eligibility criteria must be addressed.

Behavior checklists could be distributed to the student's teachers. This might include physical education, music, art, and library teachers, as well as the classroom teachers. Checklists may be sent to other staff (playground, cafeteria, bus) as necessary.

Questions on Identification

1. **What is ADHD?**

According to Barkley (1990), "ADHD is a developmental disorder characterized by developmentally inappropriate degrees of inattention, overactivity, and impulsivity. These often arise in early childhood; are relatively chronic in nature; and are not readily accounted for on the basis of gross neurological, sensory, language, motor impairment, mental retardation, or severe emotional disturbance. These difficulties are typically associated with deficits in rule-governed behavior and in maintaining a consistent pattern of work performance over time." The specific criteria for this disorder are listed in the American Psychiatric Association's *Diagnostic and Statistical Manual* (*DSM-IV*).

2. **Is ADHD a new disorder or condition?**

No. Physicians, psychologists, parents, and educators have been concerned about this condition for over a hundred years, using an ever-changing variety of terms, labels, and definitions. . . but which essentially refer to the same behavioral disorder. Part of the current confusion is due to this use of different terminology in the past, i.e., Minimal Brain Damage, Minimal Cerebral Dysfunction, Minimal Brain Dysfunction, Hyperactivity, Hyperkinesis, or ADHD.

3. **Does ADHD really exist?**

Yes. Not every child who has academic or behavioral difficulties in school has ADHD, but it is a very real and significant problem for many children. Much of the controversy about the "reality" of ADHD stems from the various and sometimes conflicting approaches to definition, diagnosis, and treatment strategies. Aside from these theoretical and methodological differences, ADHD is a disability that can lead to academic and social difficulties if no intervention takes place.

4. **How is the diagnosis of ADHD made?**

The diagnosis of ADHD is made following a comprehensive evaluation of the child using data and information from a variety of sources. An effective evaluation for ADHD is a complex process of differentiating among a variety of factors; ruling out other possible explanations for the child's symptoms (family stressors, physical illness, school anxiety, etc.); and establishing a constellation of symptoms consistent with ADHD based on the definition above. The evaluation could include the following elements:

- Complete review of school records and family/social history;
- Individual educational/behavioral assessments as appropriate; and
- Psychological/medical evaluation as appropriate.

5. **Is there a specific test for ADHD?**

Currently, there is no specific test for ADHD. The clinician examines information from different sources and looks for the constellation of symptoms. When parents say that their child is "being tested for ADHD," they are probably referring to this process of integrating data from a variety of sources. There are behavioral checklists, ADHD rating scales, psychological tests for attention span and memory, but there is no definitive scientific test for assessing ADHD at this time.

6. **Who is best qualified to diagnose ADHD?**

ADHD should be diagnosed by a family physician or clinical psychologist who may refer the students to medical specialists if warranted. Other professionals such as teachers, principals, and school nurses may contribute valuable data to the evaluation process. Parents are often the first to suspect their child's attention problems.

7. **Does the school have any special obligation to the child with ADHD who does not qualify for special education services?**

Yes. A Federal memorandum listed 1991, Clarification of Policy to Address the Needs of Children with ADHD within General and/or Special Education, takes the position that it is the responsibility of all educators to coordinate their efforts to provide services and adaptations to children in regular education who do not qualify for special education. This memorandum also emphasizes that some children with ADHD who do not qualify for special education may be entitled to other services or procedural safeguards through Section 504. (See Appendix B.)

8. **Are children with ADHD included under Section 504 of the Rehabilitation Act of 1973? What is the school district's obligation under Section 504?**

Yes. ADHD is a disability under Section 504. Even if a child with ADHD is found to be ineligible for special education services under IDEA, the requirements of Section 504 of the Rehabilitation Act of 1973 and its implementing regulations are applicable, if the student's ADHD substantially limits learning. In general, eligibility under Section 504 is a function of the severity of the child's disability condition, and children with ADHD may or may not fit within that definition. A child with a mild form of ADHD would probably not qualify for services through Section 504. The child whose learning is substantially limited by ADHD and who is not receiving meaningful educational benefit would be eligible for protection under Section 504. The district should prepare a written plan outlining the appropriate accommodations, related aids, and any other services necessary to enable the student to receive educational benefit.

Assessment

This section is the feature article by Harvey C. Parker, Ph.D., Clinical Psychologist, from the 1994 A.D.D. WareHouse catalog:

Assessment of Attention Deficit Disorders:
A Team Approach

The primary characteristics of Attention-deficit Hyperactivity Disorder (ADHD/ADD) are not difficult to spot in a classroom. However, not all children who are inattentive, impulsive, or overactive have ADD. These same symptoms can be the result of other factors such as: frustration with difficult schoolwork, lack of motivation, emotional concerns, or other medical conditions. A comprehensive assessment by a team of professionals working in conjunction with parents and the child can usually determine whether problems are the result of ADD or other factors. Members of this assessment team usually include physicians, psychologists, social workers, and school personnel such as teachers, guidance counselors, or learning specialists.

The Physician's Role

Routine physical examinations of children with ADD are often normal, but they are needed to rule out the unlikely possibility of there being a medical condition which could cause ADD-like symptoms. Tests such as chromosome studies, electroencephalograms (EEGs), magnetic resonance imaging (MRI), or computerized axial tomograms (CT scans) are not used routinely for evaluation of ADD. Child and adolescent psychiatrists and pediatric neurologists may play an important part in identifying this condition as well as other possible related conditions such as learning disabilities, Tourette syndrome, pervasive developmental disorder, obsessive compulsive disorder, anxiety disorder, depression or bipolar disorder.

The Psychologist's Role

Clinical or school psychologists administer and interpret psychological and educational tests of cognition, perception, and language development (such as intelligence, attention span, visual-motor skills, memory, impulsivity) as well as tests of achievement and social/emotional adjustment. Psychologists and other mental health professionals often integrate data collected from parents and teachers who complete behavior rating scales about the child in question. Results of such tests can provide important clues as to whether a child's difficulties are related to having ADD and/or other problems with learning, behavior, or emotional adjustment. Such scales offer quantifiable, descriptive information about the child, thus providing a means by which to compare the child's behavior to that of others of the same sex and age.

Some of the more popular rating scales used in the assessment of ADD are:

- Conners Teacher Rating Scale (CTRS) and Conners Parent Rating Scale (CPRS);
- ADD-H: Comprehensive Teacher Rating Scale (ACTeRS);
- ADHD Rating Scale;
- Child Attention Profile;
- Child Behavior Checklist (CBCL);
- Home Situations Questionnaire;
- School Situations Questionnaire; and
- Academic Performance Rating Scale (APRS).

The School's Role

Assessments for ADD should always include information about the student's current and past classroom performance, academic skills strengths and weaknesses, attention span, and other social, emotional, or behavioral characteristics. Such information can be gathered through teacher interviews, review of cumulative records, analysis of test scores, and direct observation of the student in class. The student's adjustment in class should relate to aspects of the instructional environment, namely:

- the curriculum in which the student is working;
- teacher expectations for the class and for the individual student;
- methods of instruction employed by the teacher;
- incentives for work completion;
- methods of teacher feedback to students; and
- comparative performance of other students in the class.

The Parents' Role

Having witnessed the child in a variety of situations over a number of years, parents have a unique perspective on their child's previous development and current adjustment. Information from parents is usually acquired by interview or through questionnaires completed by parents. The focus is usually on obtaining overall family history, current family structure and functioning, and documenting important events from the child's medical, developmental, social, and academic history relevant to the assessment of ADD.

The Child's Role

An interview with the child offers the clinician an opportunity to observe the child's behavior and can yield valuable information as to the child's social and emotional adjustment, feelings about themselves and others, attitudes about school and other aspects of their life. However, even children with ADD often behave well during such interviews. Therefore, observations of the child's behavior, level of activity, attentiveness, or compliance made during the interview sessions should not be taken as true of the child in other settings. Normal behavior in a one-on-one setting does not diminish the likelihood of the child having ADD.

The Team's Role after the Assessment

Ideally, after all the data has been collected, members of the assessment team should collaborate to discuss their findings. This should lead to a thorough understanding of the child's strengths and areas of need physically, academically, behaviorally, and emotionally. If a diagnosis of attention deficit disorder (and/or other conditions) is established, treatment planning should be done in all areas where interventions are recommended. The physician may discuss appropriate medical interventions with the child and parents. The psychologist or other mental health professional may discuss counseling, behavior modification, or social or organizational skills training options. The school may set up classroom interventions to accommodate the child's areas of need in school or may provide special education or related services. Once the initial assessment is completed and appropriate treatment is instituted, there should be routine follow-up by members of the assessment and treatment team to determine how the child is progressing. ADD, being a chronic condition, will often require long-term care and monitoring on a regular basis. Obviously, parents play a key role in encouraging members of the assessment and treatment team to maintain close collaboration and to work together consistently for the best interests of the child. Coordination of all this, whether it be by a parent or a professional, is no easy task, but the outcome is usually well worth the effort.

Assessment Summary

Upon completion of the assessment process, all results should be reviewed and summarized. Included should be any relevant evaluation information. A report from the health care provider should be obtained regarding the student's health status (including the diagnosis of ADHD, if appropriate) and any planning implications. It is important that these recommendations be couched in terms of the student's unique needs, abilities, and limitations, not in the form of orders for specific educational services. The Child Study Team must determine any adverse effects of the suspected disability on the student's educational performance and make an eligibility decision. This decision, along with appropriate rationale, must be documented in the evaluation summary. Again, all required written notices must be provided and parent consent obtained, if the student is determined eligible under IDEA. Written notice must also be provided if the student is determined ineligible..

Questions on Assessment

1. **What are classroom symptoms of ADHD?**

In the past, much of the classroom focus was on the ADHD student's hyperactivity, i.e., excess fidgeting, talking-out, making noises, getting out of seat without permission. However, current research indicates that other symptoms are probably more significant in terms of the long-term potential for school problems, i.e., difficulty in focusing and maintaining attention, impulsivity, poor task completion, low frustration tolerance, poor organizational skills, difficulty in getting along with other children of the same age, decreased motor skills, and emotional difficulty.

2. **Are all children with ADHD hyperactive or overactive?**

No. Hyperactivity is a frequently present, but not essential, component of ADHD. However, not all children with ADHD are hyperactive, and some may not be overactive in all situations. In fact, some children with ADHD may demonstrate normal or even below-normal activity levels (daydreaming, staring into space, "spacing-out," etc.). Under the final DSM-IV criteria, some children may be diagnosed under the *predominantly inattentive* type.

3. **Do all children with ADHD demonstrate the same symptoms?**

No. The symptoms are variable for each child. In addition, some symptoms do not occur similarly in all situations, i.e., they may occur more frequently in group situations that demand sustained attention or impulse control (in the classroom, at church, or at a family meal). Conversely, they may disappear in other settings such as on the playground, playing video games, high interest classroom activity, or participating in a one-to-one interaction with an adult, such as a visit to a physician or school psychologist.

4. **Do children with ADHD have other problems?**

Many students with ADHD have associated problems, such as poor school performance, specific learning disabilities, poor coordination, social skill deficits, aggressive behavior, low self-esteem, increased physical complaints, depression, or avoidance of school activities. These symptoms may or may not be linked to ADHD. Secondary symptoms will vary for each child, and no two children with ADHD are the same.

5. **What are the causes of ADHD?**

There is no known single cause. Instead, there seem to be a number of possible factors. ADHD is a neurologically-based, developmental condition. That is, a child may be either born with the condition or symptoms may appear early in life. Researchers currently suspect that ADHD is associated with differences in neurotransmitters in the brain, especially dopamine and norepinephrine, which are essential to sustain attention, control motor activity, and prevent impulsivity. While the child's ADHD may be influenced by environmental factors such as noise or classroom activity, there is no scientific evidence that these factors cause ADHD.

6. **How many children have ADHD?**

Opinions and research differ on this issue. The commonly accepted view is that approximately 3 to 5 percent of children have ADHD, but some estimates are much higher. This means that, on the average, one child in every classroom in the United States may have ADHD. However, due to differences in definitions and diagnostic strategies, these estimates vary widely. Research also suggests that more boys than girls have ADHD, but the ratios here also differ widely depending on the study.

7. **Will these children outgrow ADHD?**

Some children appear to develop coping skills and adaptive strategies for their ADHD, often by adolescence. Some children may outgrow the core deficits of the disorder. However, ADHD may be a life-long factor for some individuals. Much of the currently published research is about children and adolescents with ADHD. As more data about the long-range implications of ADHD begin to emerge, it appears that the disorder may persist into adulthood and be associated with continued difficulties such as the ability to hold a job, substance abuse, and learning problems.

8. **What is the school's role in the diagnostic process?**

The school's primary role in the diagnostic and treatment process is to provide a data base for use by the parents and their primary health care provider in making the diagnosis and other important decisions (such as monitoring progress and effectiveness of treatment and interventions, about the child). The school Child Study Team will develop and implement recommendations regarding educational placements and services with input from parents and the child's primary health care provider.

9. **Do all children with ADHD also have specific learning disabilities or behavior problems in school? Do they all belong in "special" programs?**

No. Not all children with ADHD have learning disabilities or behavioral problems. However, there are some "overlaps" between these issues. Studies estimate that 60 to 80 percent of children with ADHD may have additional learning and/or behavioral problems. However, many of these needs can be accommodated successfully in the regular education classroom.

10. **Do all children with a clinical diagnosis of ADHD automatically qualify for special education or other remedial programs?**

No. A clinical diagnosis of ADHD does not automatically qualify a child for special education or remedial programs. In fact, it is generally recommended that interventions be implemented in the regular classroom before special programs are even considered.

The student's Child Study Team must determine the adverse educational impact that requires specially designed instruction through an IEP as discussed in the following question. However, a student who has been diagnosed with ADHD is protected under Section 504 of the Rehabilitation Act of 1973. A 504 accommodation plan is not necessary for all students diagnosed with ADHD.

11. How does a child with ADHD qualify for special education services?

Qualifying for special education is a complex process of assessment and eligibility determination within specific disability categories. This includes a complete individual evaluation in accordance with the requirements of federal and state special education regulations and a determination by a Child Study Team that the child is eligible for and in need of specially designed instruction because of a disability. There is no separate category for qualifying a child as ADHD. A child with ADHD who has a measurable learning disability and meets eligibility criteria may qualify within the learning disability category. A child with a medical diagnosis of ADHD may qualify for special education within the category of health impairment if the multidisciplinary assessment team determines an adverse educational impact that requires specially designed instruction. **A medical diagnosis of ADHD is not in itself a guarantee of eligibility.** The school's multidisciplinary assessment team, working cooperatively with the parents, has both the responsibility and authority to determine if the ADHD is so serious that child's educational needs cannot be met in regular education with some accommodations. After this determination is made, the Child Study Team may identify the child as eligible for special education.

EDUCATIONAL INTERVENTIONS

Intervention

If the student is diagnosed as having ADHD and is determined eligible for and in need of special education and related services under one of the disability categories authorized under IDEA, a CST meeting to plan the student's individual education program should be scheduled. If the student is not eligible under IDEA, Section 504 eligibility should be considered. If the student is determined eligible under Section 504, a student accommodation plan must be developed.

Interventions may be conceptualized as a range of strategies designed to occur across and between school and home. Collaboration will enhance the likelihood of meaningful intervention. This collaboration **must continue** within the school setting, because the needs of students with ADHD require shared responsibility. Many children with ADHD do not require special education and related services, but do require specific adaptations and accommodations to the general education program.

Teacher assistance teams must recognize that each student with ADHD is an individual, with unique characteristics. Effective educational programs are based on individual student's behavioral and academic needs, rather than on presumed characteristics of the group of individuals with ADHD. Realistic expectations should be set for each student, and those interventions and strategies that will allow the student the best chance to succeed should be implemented.

Teachers need training and support to assist them in accommodating children with ADHD. Some schools have teacher/student assistance teams that can support teachers in developing and implementing appropriate classroom instructional adaptations and interventions. In addition, special education instructional and support personnel can assist teachers in identifying specific educational needs and developing appropriate classroom accommodations and interventions.

General Education Accommodations

The following article by Harvey C. Parker, Ph.D., on page 18 discusses some interventions that teachers may use in adapting the classroom environment to meet the educational needs of children with ADHD. The article is followed by a list of other accommodations found useful by classroom teachers.

ADAPT

Accommodations Help Students with Attention Deficit Disorders

Harvey C. Parker, Ph.D.

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Author of *The ADD Hyperactivity Workbook for Parents, Teachers, and Kids* and *The ADD Hyperactivity Handbook for Schools*

Children and youth with attention deficit disorder (ADD) often have serious problems in school. Inattention, impulsiveness, hyperactivity, disorganization, and other difficulties can lead to unfinished assignments, careless errors, and behavior which is disruptive to one's self and others. Through the implementation of relatively simple and straightforward accommodations to the classroom environment or teaching style, teachers can adapt to the strengths and weaknesses of students with ADD. Small changes in how a teacher approaches the student with ADD or in what the teacher expects can turn a losing year into a winning one for the child.

Examples of accommodations which teachers can make to adapt to the needs of students with ADD are grouped below according to areas of difficulty.

INATTENTION

- seat student in quiet area
- seat student near good role model
- seat student near "study buddy"
- increase distance between desks
- allow extra time to complete assigned work
- shorten assignments or work periods to coincide with span of attention; use timer
- break long assignments into smaller parts so student can see end to work
- assist student in setting short-term goals
- give assignments one at a time to avoid work overload
- require fewer correct responses for grade
- reduce amount of homework
- instruct student in self-monitoring using cueing
- pair written instructions with oral instructions
- provide peer assistance in notetaking
- give clear, concise instructions
- seek to involve student in lesson presentation
- cue student to stay on task, i.e. private signal

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IMPULSIVENESS

- ignore minor, inappropriate behavior
- increase immediacy of rewards and consequences
- use time-out procedure for misbehavior
- supervise closely during transition times
- use "prudent" reprimands for misbehavior (i.e. avoid lecturing or criticism)
- attend to positive behavior with compliments, etc..
- acknowledge positive behavior of nearby student
- seat student near good role model or near teacher
- set up behavior contract
- instruct student in self-monitoring of behavior, i.e. hand raising, calling out
- call on only when hand is raised in appropriate manner
- praise student when hand raised to answer question

Motor Activity

- allow student to stand at times while working
- provide opportunity for "seat breaks" i.e. run errands, etc.
- provide short break between assignments
- supervise closely during transition times
- remind student to check over work product if performance is rushed and careless
- give extra time to complete tasks (especially for students with slow motor tempo)

MOOD

- provide reassurance and encouragement
- frequently compliment positive behavior and work product
- speak softly in non-threatening manner if student shows nervousness
- review instructions when giving new assignments to make sure student comprehends directions
- look for opportunities for student to display leadership role in class
- conference frequently with parents to learn about student's interests and achievements outside of school
- send positive notes home
- make time to talk alone with student
- encourage social interactions with classmates if student is withdrawn or excessively shy
- reinforce frequently when signs of frustration are noticed
- look for signs of stress build up and provide encouragement or reduced work load to alleviate pressure and avoid temper outburst
- spend more time talking to students who seem pent up or display anger easily
- provide brief training in anger control: encourage student to walk away; use calming strategies; tell nearby adult if getting angry

Academic Skills

- if reading is weak: provide additional reading time; use "previewing" strategies; select text with less on a page; shorten amount of required reading; avoid oral reading
- if oral expression is weak: accept all oral responses; substitute display for oral report; encourage student to tell about new ideas or experiences; pick topics easy for student to talk about
- if written language is weak: accept non-written forms for reports (i.e. displays, oral, projects); accept use of typewriter, word processor, tape recorder; do not assign large quantity of written work; test with multiple choice or fill in questions
- if math is weak: allow use of calculator; use graph paper to space numbers; provide additional math time; provide immediate correctness feedback and instruction via modeling of the correct computational procedure

ORGANIZATION PLANNING

- ask for parental help in encouraging organization.
- provide organization rules
- encourage student to have notebook with dividers and folders for work
- provide student with homework assignment book
- supervise writing down of homework assignments
- send daily/weekly progress reports home
- regularly check desk and notebook for neatness, encourage neatness rather than penalize sloppiness
- allow student to have extra set of books at home
- give assignments one at a time
- assist student in setting short term goals
- do not penalize for poor handwriting if visual-motor deficts are present
- encourage learning of keyboarding skills
- allow student to tape record assignments or homework

COMPLIANCE

- praise compliant behavior
- provide immediate feedback
- ignore minor misbehavior
- use teacher attention to reinforce positive behavior
- use "prudent" reprimands for misbehavior (i.e. avoid lecturing or criticism)
- acknowledge positive behavior of nearby student
- supervise student closely during transition times
- seat student near teacher
- set up behavior contract
- implement classroom behavior management system
- instruct student in self-monitoring of behavior

SOCIALIZATION

- praise appropriate behavior
- monitor social interactions
- set up social behavior goals with student and implement a reward program
- prompt appropriate social behavior either verbally or with private signal
- encourage cooperative learning tasks with other students
- provide small group social skills training
- praise student frequently
- assign special responsibilities to student in presence of peer group so others observe student in a positive light

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Intervention Table

The following table, which begins on page 19, provides examples of ways to accommodate the needs of children with ADHD in the general classroom environment. Not all areas of concern apply to all students with this diagnosis. Areas of concern and interventions specific to the individual student's needs should be identified and an accommodation plan developed. The student's teachers should become familiar with the plan. The teachers must be provided with the necessary supports to implement this plan.

SUGGESTED INTERVENTIONS

AREA OF CONCERN	INTERVENTIONS
Teacher/student instructional style	• Seek a good fit between the student's learning style and the teacher's instructional style.
Parent/student/teacher communications	• Develop a daily/weekly journal. • Develop parent/student/school contacts. • Notify parents of missing or incomplete assignments. • Provide daily or weekly progress reports. • Gradually move to monthly reports. • Provide parents with duplicate sets of texts if student has trouble remembering to bring home books for homework. • Schedule periodic parent/teacher meetings.
Staff communications	• Identify resource staff. • Maintain ongoing communication with building principal. • Network with other staff. • Schedule building team meetings.
Instructional day/class schedule	• Allow student more time to pass in hallways. • Alternate lessons or classes that require greater auditory attention with those that are more visual or active. • Assign student to structured but flexible teachers. • Hand schedule at the secondary level. • Modify class schedule. • Schedule more demanding classes earlier in the day.
Difficulty sequencing and completing steps to accomplish specific tasks (e.g., writing a book report, term paper, organized paragraphs, division problems, etc.)	• Allow student five minutes at the end of each class to organize books, papers, etc., before beginning next class. • Break up task into workable and obtainable steps. • Color code student's materials to help the student keep organized. • Have a more organized student take notes and duplicate his/her notes. • Provide examples and specific steps to accomplish task. • Show organization is important by modeling it.

AREA OF CONCERN	INTERVENTIONS
Need for reinforcers	• Increase frequency of rewards and fines. • Use token systems. • Provide access to rewards several times a day. • Increase immediacy of consequences. • Increase magnitude or power of rewards. • Have parents send in preferred toys or games. • Use electronic games as a reinforcer. • Use home-based reward programs. • Try group rewards for class if child meets quota.
Shifting from one uncompleted activity to another without closure	• Define the requirements of a completed activity (e.g., *Your math is finished when all six problems are complete and corrected. Do not begin on the next task until your math is finished).*
Difficulty following through on instructions from others	• Gain student's attention before giving instructions. • Use both oral and written instructions. • Give one instruction at a time. Quietly repeat directions to the student after they have been given to the rest of the class. Check for understanding by having the student repeat the instructions. • Place general methods of operation and expectations on charts displayed around the room and/or on sheets to be included in student's notebook.
Difficulty prioritizing from most to least important	• Prioritize assignments and activities. • Provide a model to help students. • Post the model and refer to it often.
Difficulty completing assignments	• Arrange for student to have a "study buddy" with phone number in each subject area. • List and/or post (and say) all steps necessary to complete each assignment. • Make frequent checks for work/ assignment completion. • Reduce the assignment into manageable sections with specific due dates. • Use calendar to plan long-term assignments. • Use daily or weekly assignment sheets or notebook (with teacher verifying accuracy of assignments recorded).

AREA OF CONCERN	INTERVENTIONS
Difficulty sustaining effort and accuracy over time.	● Decrease work load to fit child's attentional capacity. - Smaller quotas for productivity - More frequent, but shorter work periods - Lower accuracy quotas that increase over time with child's success - Don't send unfinished classwork home - Eliminate high appeal distracters - Accept a reasonable limit to the amount of time the student will spend each night on homework ● Develop discrete cues to let student know when she/he is off task. ● Increase the frequency of positive reinforcement and encouragement (catch the student doing it right and let him/her know it). ● Reduce assignment length and strive for quality (rather than quantity). ● See if the student benefits from cooperative learning groups or peer tutoring. ● Teach problem-solving behavior and time-management strategies. ● Set time limits for work completion ● Use timer, if possible, for external time references. ● Use tape recorded prompts.
Difficulty with any tasks that require memory	● Combine seeing, saying, writing, and doing; student may need to subvocalize to remember. ● Teach memory techniques as a study strategy (e.g., mnemonics, visualization, oral rehearsal, numerous repetitions).
Confusion from nonverbal cues (misreads body language, etc.)	● Model and have student practice reading nonverbal cues in a safe setting. ● Directly teach (tell the student) what non-verbal cues mean.
Confusion from written material (difficulty finding main idea from a paragraph, attributes greater importance to minor details)	● Provide advance organizers such as maps, charts, outlines, etc. Use methods that alert students as to the lesson structure and expected outcomes. ● Provide an outline of important points from reading material. ● Provide tape of text/chapter. ● Teach outlining, main idea/details concept.

AREA OF CONCERN	INTERVENTIONS
Difficulty with taking tests	• Allow extra time for testing. • Teach test-taking skills and strategies. • Allow oral and/or untimed tests. • Allow student to type tests or use word processor. • Give more "wait time"--the amount of time you want for an answer. • Permit breaks during tests. • Permit student to type tests or use word processor. • Use clear, readable and uncluttered test forms. • Use test format with which student is most comfortable. Allow ample space for student response. Consider having lined answer spaces for essay or short answer questions. • When impulsivity on multiple choice tests means the student will not read all choices, have the student eliminate all incorrect responses, rather than choose one correct answer.
Confusion from spoken material, lectures and audio visual material (difficulty finding main idea from presentation, attributes greater importance to minor details)	• Allow peers to share notes from presentation (have student compare own notes with copy of peer's notes). • Encourage use of tape recorder. • Provide framed outlines of presentations (introducing visual and auditory cues to important information). • Provide student with a copy of presentation notes. • Teach and emphasize key words. (*the following . . ., the most important point . . ., etc.*).
Difficulty with fluency in handwriting (e.g., good letter/word production but very slow and laborious)	• Allow alternate method of production (computer, scribe, oral presentation, etc.). • Allow for shorter assignments (quality vs. quantity).
Poor handwriting (often mixing cursive and manuscript and capitals with lowercase letters)	• Allow for a scribe and guide for content, not handwriting. • Allow for use of a computer or typewriter. • Consider alternative methods for student response (e.g., tape recorder, oral reports, etc.). • Allow student to mix cursive and manuscript (allow any method of production).

AREA OF CONCERN	INTERVENTIONS
Difficulty sustaining attention to tasks or other activities (easily distracted by extraneous stimuli)	• Avoid assigning student to "open classroom" or "split classroom" settings. • Create a structured environment with predictable routines. • Sit the child close to the teacher's desk/lecture area. • Post class rules in prominent place. • Prepare a stimuli-reduced area that all students may use. • Reward attention. Break up activities into small units. • Reward for timely accomplishments. • Seat at individual desks instead of tables. • Consider use of individual headphones to play soft music to block out other auditory directions. Introduce headphones as a privilege or pair appropriate use with reinforcement. • Seat away from auditory distractions such as heaters, air conditioners, etc. • Seat near teacher and appropriate role models, but still as part of the group. • Seat where most visual distractions are behind student. • Surround by model students. • Use physical proximity and touch. Use earphones and/or study carrels, quiet place, or preferential seating.
Difficulty participating in class without being interruptive; difficulty working quietly	• Reward appropriate behavior (catch student "being good"). • Seat student in close proximity to the teacher. • Use study carrel if appropriate.
Poorly developed study skills	• Students can be responsible for developing "study guides" or unit questions for other members of class (use as cooperative learning activity). • Teach study skills specific to the subject area: organization (e.g., assignment calendar), textbook reading, note taking (finding main idea/detail, mapping, outlining, skimming, summarizing). • Use analogies, metaphors, outlines and/or mapping strategies. Encourage students to develop their own.

AREA OF CONCERN	INTERVENTIONS
Frequent messiness or sloppiness; poor organization	• Arrange for a peer who will help with organization. • Assist student to keep materials in a specific place (e.g., pencils and pens in pouch). • Repeat expectations as necessary. • Give reward points for notebook checks and proper paper format. • Provide clear copies of worksheets and handouts and consistent format for worksheets. • Teach organizational skills. Be sure student has daily, weekly and/or monthly assignment sheets; list of materials needed daily; and consistent format for papers. • Have a consistent way for students to turn in and receive back papers; reduce distractions. • Use graph paper for handwriting and math problems.
Poor self-monitoring (careless errors in spelling, arithmetic, reading)	• Allow use of calculators as appropriate. • Have student proofread work when it is "cold." • Teach specific methods of self-monitoring, e.g., *Stop-Look-Listen*. • Use checklists when necessary that outline directions, steps, or procedures to be followed.
Low fluency or production of written material (takes hours on a 10 minute assignment)	• Allow alternative method for completing assignment (oral presentation, taped report, visual presentation, graphs, maps, pictures, etc., with reduced written requirements. • Allow alternative method of writing (e.g., typewriter, computer, cursive or printing, or a scribe). • Develop a reward system for work completion, with focus on quality and timelines.
Frequent fidgeting with hands, feet or objects; squirming in seat	• Allow alternative movement when possible. • Break tasks down to small increments and give frequent positive reinforcement for accomplishments (this type of behavior is often due to frustration).
Frequent excessive talking	• Make sure student is called upon when it is appropriate and reinforce listening. • Teach student hand signals and use to tell student when and when not to talk.

AREA OF CONCERN	INTERVENTIONS
Difficulty making transitions (from activity to activity or class to class); takes an excessive amount of time to find school supplies, gives up, refuses to leave previous task; appears agitated during change	● Allow the student extra time to organize books and papers from last class before beginning next class. ● Allow the student to leave class early to go to his or her locker for supplies before hallways become such a flurry of activity and so distracting that he or she can't concentrate on getting the needed books and supplies for the next class. ● Arrange for an organized helper (peer). ● Have specific locations for all materials (pencil pouches, tabs in notebooks, etc.). ● Program student for transitions. Give advance warning of when a transition is going to take place (*Now we are completing the worksheet; next we will. . .)* and the expectations for the transition (*. . . and you will need)*. ● Specifically name and display lists of materials needed until a routine is possible. List steps necessary to complete each assignment.
Frequent self put-downs, poor personal care and posture, negative comments about self and others, low self-esteem	● Allow opportunities for the student to show his/her strength. ● Give positive recognition. ● Help student identify and develop strengths and affinities. ● Structure for success. ● Train student for self-monitoring, reinforce improvements, teach self-questioning strategies. (*What am I doing? How is that going to affect others?)*
Losing things necessary for task or activities at school or at home (e.g., pencils, books, assignments before, during and after completion of a given task)	● Help student organize. Frequently monitor notebook and dividers, pencil pouch, locker, book bag, desks. *(A place for everything and everything in its place.)* ● Provide positive reinforcement for good organization. ● Provide student with a list of needed materials and their locations.

AREA OF CONCERN	INTERVENTIONS
Inappropriate behaviors in a team or large group sport or athletic activity (difficulty waiting turn in games or group situations)	• Give the student a responsible job (e.g., team captain, care and distribution of balls, score keeping, etc.); consider leadership role. • Have student in close proximity to teacher.
Inappropriate bus behaviors	• Allow the student to choose a friend to share the seat with him/her so that he/she views his/her special seating arrangement as a problem-solving technique instead of a punishment. • Assign a window seat, so the student can't easily touch, or be touched by, other students as they enter and exit the bus. • Seat student near bus driver. • When student demonstrates appropriate bus behavior, be sure to reinforce it with praise.
Frequent involvement in physical dangerous activities without considering possible consequences	• Anticipate dangerous situations and plan for in advance. • Pair with responsible peer. (Rotate possible students so that they don't wear out!) • Stress *Stop-Look-Listen.*
Poor adult interactions; defies authority; constantly seeks adult approval; clings	• Provide positive attention. • 'Talk with student individually about the inappropriate behavior (*What you are doing is. . . A better way of getting what you need or want is . . . .)*
Difficulty using unstructured time--recess, hallways, lunch room, locker room, library, assembly	• Allow the student to assist custodian or work in cafeteria, assist librarian, office aide or to do helpful errands for teachers. • Allow the student to be one of a group of students working in the library. • Allow the student to eat lunch with a friend away from the cafeteria area, and preferably in a more quiet, less stimulating environment. • Allow the student to play computer or board games with another student, or a small group of students in a supervised environment. • Encourage group games and participation (organized school clubs and activities). • Provide student with a definite purpose during unstructured activities (*The purpose of going to the library is to check out . . ., the purpose of . . . is to . . . .)*

AREA OF CONCERN	INTERVENTIONS
Poor use of time (sitting, staring off into space, doodling, not working on task at hand)	• Give the student a time limit for a small unit of work with positive reinforcement for accurate completion. • Teach reminder cues (a gentle touch on the shoulder, hand signal, etc.). • Tell the student your expectation of what it means to pay attention. *(You look like you are paying attention when . . .)* • Use a contract, timer, etc., for self-monitoring.

Home-Based Strategies and Interventions

Living with a child who has ADHD can be a very challenging experience. Discovering strategies that help the child effectively manage ADHD behaviors may help reduce stress within the home.

Since all children with ADHD are different, the management strategies for each will also be different. Consequently, it becomes extremely important that parents develop a thorough understanding of ADHD and the specific ways in which it impacts their own son or daughter. Having this understanding is probably the single most important factor to achieving a positive outcome for the child because it provides the foundation on which all other management strategies will be based. Knowledge empowers parents to deal more effectively with the disorder. Also, the child with ADHD should become an active participant in developing the compensatory strategies he or she will need to succeed in learning and in life.

Specific Strategies and Interventions

The following chart provides suggestions for parents of children with ADHD. These suggestions reinforce and support school-based interventions.

AREA OF CONCERN	ACCOMMODATIONS
Difficulty with structure/organization	• Develop schedules and routines for your child to follow and post them in a prominent place. • Help your child develop good organizational skills. • Prepare your child ahead of time when there will be a change from the normal routine. • Structure the home environment.

AREA OF CONCERN	ACCOMMODATIONS
Difficulty sustaining effort/accuracy	• Compile a list of rewards and consequences that are powerful motivators for your child -- sit down with him or her and update the list frequently to keep it fresh and motivating. • Give praise and encouragement freely to motivate and reinforce good behaviors. • Recognize your child's efforts when he or she is not successful.
Difficulty completing chores/tasks	• Allow less important things to slide--pick your battles! • Model task for your child that he or she finds difficult--repetition is often necessary to help internalize the behavior or task that is being taught. • Write step-by-step instructions on 3x5 index cards for each chore you expect your child to do, then have him or her refer to the card when it is time to do the chore.
Difficulty completing homework	• Divide homework time into manageable work periods. • Involve your child in extracurricular activities he or she enjoys and at which he or she can be successful. • Provide a clutter-free study area for doing homework. • Provide your child with a daily assignment notebook to help him or her keep track of his or her homework assignments. • Set a limit for the amount of time your child can spend on homework each night and notify school personnel that assignments may need to be modified accordingly. • Strive for good communication and collaboration between home and school.

AREA OF CONCERN	ACCOMMODATIONS
Difficulty getting along with others	• Do not measure success by comparing him or her to peers, but make him or her responsible for improvement. • Help your child understand the part he or she plays in conflicts. • Provide opportunities that promote successful social interaction with other children (short, one-on-one, supervised play situations seem to be most successful). • Recognize strengths and encourage opportunities to build them.
Difficulty following rules/solving problems	• Ask for his or her perception regarding problem situations. • Determine what rules are really important in your household, then make them very clear and concise and enforce them consistently. • Have an area to which your child can go to for short time outs when he or she needs to regain control of himself or herself. • Have reasonable expectations that take into account the ways your child's disorder affects him or her. • Keep emotional climate calm--avoid statements of judgment; use "I" observations rather than "you" judgments. • Respect your child's uniqueness. • Role play and brainstorm together with your child when problems do occur. • Show a lot of affection toward your child to reinforce that he or she is lovable. • State what you want your child to do, instead of what you don't want him or her to do. • Try to anticipate and avoid situations that will "set off" your child. • Use a problem-solving approach, discussing with him or her the advantages and disadvantages of each solution.

Medical Intervention for Children with Attention Deficit Disorder

This section was taken from the OSEP publication, "Proceedings of the Forum on the Education of Children with Attention Deficit Disorder," (January, 1993).

Findings

The University of California, Irvine (UC-Irvine) Attention Deficit Disorder (ADD) Center highlighted a recent reviews that sought to answer questions about the limitations of medication's effect on school behavior and performance and about the effect of stimulant medication on the academic performance of children with ADHD. They examined the effects of stimulant medication on aggression in children with ADHD. The UC-Irvine group's synthesis addresses five critical topics concerning the research reviews in this area that cover a half century of work.

First, the *invariant findings* in the literature reviews are extracted. Second, the *effects of stimulant medication* are identified, on the basis of agreements across multiple reviews in the literature. Third, the *persisting controversies* about the clinical use of medication are specified and related to authors' philosophical differences, rather than their different views of the effects of medication. Fourth, the *boundary conditions* that may limit the immediate and long-term effects of stimulant medication are defined. Fifth, some of the *unanswered questions* about the effects of stimulant medication on children with ADHD that are now under investigation are specified. Following is a brief summary across the reviews.

What are the limitations of stimulant medication treatment? (Swanson et al., 1992)

Researchers drew the following conclusions:

- Long-term beneficial effects have not been verified by research.
- Short-term effects of stimulants should not be considered a permanent solution to chronic ADHD symptoms.
- Stimulant medication may improve learning in some cases but impair learning in others.
- In practice, prescribed doses of stimulants may be too high for optimal effects on learning, and the length of action of most stimulants is viewed as too short to affect academic achievement.

Can short-term gains from medication be translated into long-term academic improvement? (Carlson and Smith)

- There was clear evidence of short-term improvement in performance on academic tasks in the laboratory and in the classroom.

- Thorough medical evaluations should be performed for each child. Then standard procedures should be used to administer "real-life" academic tasks, and the results should be communicated to a physician, who would determine an appropriate medication dose and frequency of administration.

What is the role of stimulant-medication in reducing aggressive behavior? (Hinshaw, 1991)

- In clinical practices, stimulants are frequently prescribed to manage disruptive behavior.
- Stimulants have small effects on performance in laboratory or playroom settings, but large effects on naturalistic observations of aggression in the classroom or playground.
- Any short-term improvement of aggression with stimulant medication is likely to be counteracted by medication compliance problems, length-of-action problems (resulting in periods when the medication is not acting in peer and neighborhood environments), and the continuous stressful interchanges associated with low socioeconomic status and difficult family environments.

Parents and teachers of children with ADHD can expect the following results from stimulant medication:

- A beneficial clinical response to only 70 to 80 percent of diagnosed cases.
- Temporary management of diagnostic symptoms, including an improved ability to modulate motor behavior, increased concentration or effort on tasks, and improved self-regulation.
- Temporary management of associated features, including increased compliance and effort, decreased physical and verbal hostility, decreased negative social interactions, and increased amount and accuracy of work when performing previously learned skills.
- No paradoxical responses. Normal children and normal adults treated with these medications, like children with ADHD treated with the medications, respond with decreased activity and increased concentration (although their responses may be smaller in magnitude).
- Uncertainty about responses, since the beneficial clinical response cannot be predicted by neurological signs, physiological treasures or biochemical markers.
- Side effects, including the appearance of or an increase in tics (infrequent), eating or sleeping problems (frequent), and (at high doses) possible negative psychological effects on cognition and attribution and possible growth inhibition.

- No large effects on skills or higher order processes--Teachers and parents should not expect significantly improved reading or athletic skills, positive social skills, or learning of new concepts.
- No improvement in long-term adjustments--Teachers and parents should not expect long-term improvements in academic achievement or reduced antisocial behavior.

Questions on Intervention

1. **What are the major intervention categories for ADHD and who provides them?**

There are four general intervention categories. Research is very clear that these are typically most effective when they are implemented in combination, rather than singly. These include:

- Medical management and medication, provided by psychiatrists, neurologists, pediatricians, and/or nurse clinicians.
- Behavior modification and social skills training, provided by school psychologists, school nurses, school social workers, school counselors, and/or other school staff.
- Parent education and support, provided by school psychologists, school social workers, counselors, and/or parent support groups.
- Classroom interventions and accommodations and inservice training, provided by school staff, educational specialists, and/or instructional assistants or tutors.

The implementation of a comprehensive, integrated intervention plan for any child with ADHD requires cooperation, coordination, and communication among all the participants. In addition, building staff need inservice training regarding effective interventions and accommodations for children with ADHD.

2. **Is there a cure for ADHD?**

There is no cure for ADHD at this time. However, with the right combination of interventions, the frequency, intensity, and duration of the learning and behavioral problems associated with ADHD may be significantly reduced.

3. How are medication decisions made?

The decision as to whether to medicate a child for ADHD, as well as questions of dosage and type of medication, are made by the child's physician and parents. These clinical decisions are generally made on the basis of formal medical evaluation, anecdotal reports, and the use of various ADHD rating scales that may be completed by parents regarding behavior at home and by school staff regarding behavior at school. School staff may be asked to continue completing these rating scales even after the initial decision to medicate is made. This allows the physician to determine whether the medication is effective, if a dosage change is required, and whether to discontinue the medication. It is also a good idea to have more than one person (such as a classroom teacher, a school psychologist, and a paraprofessional) do ratings at school, to minimize the relative subjectivity of these scales.

4. Should school personnel ever recommend or require that a child be placed on or taken off medication?

No. This is a decision for parents and their physician. As with the issue of diagnosis, the school's role should be to provide a data base of observational and objective information to the parents and physician so they can make the best decision. School staff should avoid giving personal advice or opinions regarding medication because of potential liability.

5. What are the commonly prescribed medications for ADHD? How do they work?

The commonly prescribed medications for ADHD are psycho-stimulants, such as methylphenidate (Ritalin), dextroamphetamine (Dexedrine), and pemoline (Cylert), as well as antidepressants. It is thought that these medications work by stimulating the production of specific chemicals in the brain which are essential for normal focused attention, planning, and organization. The stimulant medications are relatively fast-acting, and any behavioral changes will be seen in a relatively short amount of time. A small percentage of children also require combinations of medications such as stimulants and antidepressants.

6. What should teachers do if they suspect side effects?

Suspected side effects must be reported immediately to the school nurse, parents, and physician. The physician can then determine if a dosage adjustment or change to another medication is necessary.

7. **How should medication be administered at school?**

Designated school staff must take responsibility for safely storing medication and monitoring the timely dispensation of prescribed doses. Individual districts are required to have their own policies and procedures. Some children with ADHD, who have difficulty remembering daily routines, may need to be reminded to take their medication.

8. **Does providing special accommodations in classwork, behavioral rewards, or homework modifications simply allow the child to avoid responsibility?**

No. These children have an identified disability. Schools need to provide appropriate behavior programs, curriculum adaptations and reasonable accommodations to children with ADHD to help them be successful in school. For example, some children with ADHD have a difficult time remembering the details of homework assignments, and sending home a daily homework sheet for parental supervision would be a relatively simple response to this problem.

FOLLOW-THROUGH

Monitor Progress

Once a student is diagnosed as ADHD, interventions in the classroom and other settings are implemented. The student's success in the educational setting is monitored on a regular basis to determine if interventions are effective.

Communication with Health Care Provider and Parents

The student's parents and physician will decide whether or not the student is to receive medical treatment. If medication is prescribed, the school nurse or other designated staff may be asked to monitor the administration at school according to required procedures for administration of medication. Idaho's controlled substance statutes require staff to store medicine in a locked area and to be present when administering drugs. District guidelines must be established and followed carefully.

Questions on Follow-Through

1. **What can parents do if they disagree with school decisions or services?**

   Ideally, parents, clinicians, and school districts will develop cooperative partnerships to meet the needs of children with ADHD in both regular and special education. However, when differences occur, parents do have numerous and specific procedural safeguards available, i.e., they may request an independent assessment or a hearing to challenge any actions regarding the identification, evaluation, placement, or services for their child if they cannot otherwise resolve their differences. Under Section 504 parents may file a grievance with the district Section 504 coordinator, file a complaint with the Office of Civil Rights, request a due process hearing, or go to court.

2. **What is in the future for children with ADHD, their families, and their schools?**

   Much of the ongoing research about ADHD in the private and public sectors holds real promise in terms of developing increasingly effective assessment and intervention strategies for children with ADHD. The federal and state governments and local school districts are increasingly committed to making this important information available to educators and to developing appropriate programs to improve the academic and social competence of these children. More effective early intervention, new assessment/ treatment techniques, staff development programs for educators, outcome studies about adults with ADHD, and caring partnerships of parents, support groups, professionals, and educators will all be part of this future.

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APPENDIX A

FEDERAL POLICY BULLETIN ON ADHD

Policy Clarification

(Memorandum from Robert R. Davila, U.S. Office of Education, Office of Special Education and Rehabilitative Services; Michael L. Williams, Office of Civil Rights; and John T. MacDonald, Office of Elementary and Secondary Education, to Chief State School Officers, September 16, 1991.)

I. Introduction

There is a growing awareness in the education community that attention deficit disorder (ADD) and attention deficit hyperactive disorder (ADHD) can result in significant learning problems for children with those conditions. While estimates of the prevalence of ADD vary widely, we believe that three to five percent of school-aged children may have significant educational problems related to this disorder. Because ADD has broad implications for education as a whole, the Department believes it should clarify State and local responsibility under Federal law for addressing the needs of children with ADD[1] in the schools. Ensuring that these students are able to reach their fullest potential is an inherent part of the National education goals and AMERICA 2000. The National goals, and the strategy for achieving them, are based on the assumptions that: (1) all children can learn and benefit from their education; and (2) the educational community must work to improve the learning opportunities for all children.

This memorandum clarifies the circumstances under which children with ADD are eligible for special education services under Part B of the Individuals with Disabilities Education Act (Part B), as well as the Part B requirements for evaluation of such children's unique educational needs. This memorandum will also clarify the responsibility of State and local educational agencies (SEAs and LEAs) to provide special education and related services to eligible children with ADD under Part B. Finally, this memorandum clarifies the responsibilities of LEAs to provide regular or special education and related aids and services to those children with ADD who are not eligible under Part B, but who fall within the definition of "handicapped person" under Section 504 of the Rehabilitation Act of 1973. Because of the overall educational responsibility to provide services for these children, it is important that general and special education coordinate their efforts.

II. Eligibility for Special Education and Related Services under Part B

Last year during he reauthorization of the Education of the Handicapped Act (now the Individuals with Disabilities Education Act), Congress gave serious consideration to including ADD in the definition of "children with disabilities" in the statute. The Department took the position that ADD does not need to be added as a separate disability category in the statutory definition since children with ADD who require special education and related services can meet the eligibility criteria for services under Part B. This continues to be the Department's position.

No change with respect to ADD was made by Congress in the statutory definition of "children with disabilities," however, language was included in Section 102(a) of the Education of the Handicapped Act Amendments of 1990 that required the Secretary to issue a Notice of Inquiry (NOI) soliciting public comment on special education for children with ADD under Part B. In response to the NOI (published November 29, 1990 in the Federal Register), the Department received over 2000 written comments, which have been transmitted to the Congress. Our review of these written comments indicates that there is confusion in the field regarding the extent to which children with ADD may be served in special education programs conducted under Part B.

A. Description of Part B

Part B requires SEAs and LEAs to make a free appropriate public education (FAPE) available to all eligible children with disabilities and to ensure that the rights and protections of Part B are extended to those children and their parents 20 U.S.C. 1412(2), 34 CFR §§300 121 and 300.2. Under Part B, FAPE, among other elements, includes the provision of special education and related services, at no cost to parents, in conformity with an individualized education program (IEP). 34 CFR §300.4.

In order to be eligible under Part B, a child must be evaluated in accordance with 34 CFR §§300.530-300.534 as having one or more specified physical or mental impairments, and must be found to require special education and related services by reason of one or more of these impairments.[2] 20 U.S.C. 1401(a)(1); 34 CFR §300.5. SEAs and LEAs must ensure that children with ADD who are determined eligible for services under Part B receive special education and related services designed to meet their unique needs, including special education and related services needs arising from the ADD. A full continuum of placement alternatives, including the regular classroom, must be available for providing special education and related services required in the IEP.

B. Eligibility for Part B services under the "Other Health Impaired" Category

The list of chronic or acute health problems included within the definition of "other health impaired" in the Part B regulations is not exhaustive. The term "other health impaired" includes chronic or acute impairments that result in limited alertness, which adversely affects educational performance. Thus, children with ADD should be classified as eligible for services under the "other health impaired" category in instances where the ADD is a chronic or acute health problem that results in limited alertness, which adversely effects educational performance. In other words, children with ADD, where the ADD is a chronic or acute health problem resulting in limited alertness, may be considered disabled under Part B solely on the basis of this disorder within the "other health impaired" category in situations where special education and related services are needed because of the ADD.

C. Eligibility for Part B services under Other Disability Categories

Children with ADD are also eligible for services under Part B if the children satisfy the criteria applicable to other disability categories. For example, children with ADD are also eligible for services under the "specific learning disability" category of Part B if they meet the criteria stated in §§300.5(b)(3) and 300.541 or under the "seriously emotionally disturbed" category of Part B if they meet the criteria stated in §300.5(b)(8).

III. Evaluations under Part B

A. Requirements

SEAs and LEAs have an affirmative obligation to evaluate a child who is suspected of having a disability to determine the child's need for special education and related services. Under Part B, SEAs and LEAs are required to have procedures for locating, identifying and evaluating all children who have a disability or are suspected of having a disability and are in need of special education and related services. 34 CFR §§300.128 and 300.220. This responsibility, known as "child find," is applicable to all children from birth through 21, regardless of the severity of their disability.

Consistent with this responsibility and the obligation to make FAPE available to all eligible children with disabilities, SEAs and LEAs must ensure that evaluations of children who are suspected of needing special education and related services are conducted without undue delay. 20 U.S.C. 1412(2). Because of its responsibility resulting from the FAPE and child find requirements of Part B, an LEA may not refuse to evaluate the possible need for special education and related services of a child with a prior medical diagnosis of ADD solely by reason of that medical diagnosis. However, a medical diagnosis of ADD alone is not sufficient to render a child eligible for services under Part B.

Under Part B, before any action is taken with respect to the initial placement of a child with a disability in a program providing special education and related services, "a full and individual evaluation of the child's educational needs must be conducted in accordance with requirements of §300.532." 34 CFR §300.531. Section 300.532(a) requires that a child's evaluation must be conducted by a multidisciplinary team, including at least one teacher or other specialist with knowledge in the area of suspected disability.

B. Disagreements Over Evaluations

Any proposal or refusal of an agency to initiate or change the identification, evaluation, or educational placement of the child, or the provision of FAPE to the child is subject to the written prior notice requirements of 34 CFR §§300.504-300.505.[3] If a parent disagrees with the LEA's refusal to evaluate a child or the LEA's evaluation and determination that a child does not have a disability for which the child is eligible for services under Part B, the parent may request a due process hearing pursuant to 34 CFR §§300.506-300.513 of the Part B regulations.

IV. Obligations Under Section 504 of SEAs and LEAs to Children with ADD Found Not To Require Special Education and Related Services under Part B.

Even if a child with ADD is found not to be eligible for services under Part B, the requirements of Section 504 of the Rehabilitation Act of 1973 (Section 504) and its implementing regulation at 34 CFR Part 104 may be applicable. Section 504 prohibits discrimination on the basis of handicap by recipients of Federal funds. Since Section 504 is a civil rights law, rather than a funding law, its requirements are framed in different terms than those of Part B. While the Section 504 regulation was written with an eye to consistency with Part B, it is more general, and there are some differences arising from the differing natures of the two laws. For instance, the protections of Section 504 extend to some children who do not fall within the disability categories specified in Part B.

Policy Clarification

A. Definition

Section 504 requires every recipient that operates a public elementary or secondary education program to address the needs of children who are considered "handicapped persons" under Section 504 as adequately as the needs of nonhandicapped persons are met. "Handicapped person" is defined in the Section 504 regulation as any person who has a physical or mental impairment which substantially limits a major life activity (e.g., learning). 34 CFR §104.3(1). Thus, depending on the severity of their condition, children with ADD may fit within that definition.

B. Programs and Services Under Section 504

Under Section 504, an LEA must provide a free appropriate public education to each qualified handicapped child. A free appropriate public education, under Section 504, consists of regular or special education and related aids and services that are designed to meet the individual student's needs and based on adherence to the regulator requirements on educational setting, evaluation, placement, and procedural safeguards. 34 CFR §§104.33, 104.34, 104.35, and 104.38. A student may be handicapped within the meaning of Section 504, and therefore entitled to regular or special education and related aids and services under the Section 504 regulation, even though the student may not be eligible for special education and related services under Part B.

Under Section 504, if parents believe that their child is handicapped by ADD, the LEA must evaluate the child to determine whether he or she is handicapped as defined by Section 504. If an LEA determines that a child is not handicapped under Section 504, the parent has the right to contest that determination. If the child is determined to be handicapped under Section 504, the LEA must make an individualized determination of the child's educational needs for regular or special education or related aids and services. 34 CFR §104.35. For children determined to be handicapped under Section 504, implementation of an individualized education program developed in accordance with Part B, although not required, is one means of meeting the e free appropriate public education requirements of Section 504.[4] The child's education must be provided in the regular education classroom unless it is demonstrated that education in the regular environment with the use of supplementary aids and services cannot be achieved satisfactorily. 34 CFR §104.34.

Should it be determined that the child with ADD is handicapped for purposes of Section 504 and needs only adjustments in the regular classroom, rather than special education, those adjustments are required by Section 504. A range of strategies is available to meet the educational needs of children with ADD. Regular classroom teachers are important in identifying the appropriate educational adaptations and interventions for many children with ADD.

SEAs and LEAs should take the necessary steps to promote coordination between special and general education programs. Steps also should be taken to train general education teachers and other personnel to develop their awareness about ADD and its manifestations and the adaptations that can be implemented in general education programs to address the instructional needs of these children. Examples of adaptations in general education programs could include the following:

- providing a structured learning environment; repeating and simplifying instructions about in-class and homework assignments supplementing verbal instructions with visual instructions; using behavioral management techniques; adjusting class schedules; modifying test delivery; using tape recorders, computer-aided instruction, and other audiovisual equipment; selecting modified textbooks or workbooks; and tailoring homework assignments.

Other provisions range from consultation to special resources and may include reducing class size; use of one-on-one tutorials; classroom aides and not takers; involvement of a "services coordinator" to oversee implementation of special programs and services, and possible modification of nonacademic times such as lunchroom recess, and physical education.

Through the use of appropriate adaptations and interventions in general classes, many of which may be required by Section 504, the Department believes that LEAs will be able to effectively address the instructional needs of many children with ADD.

C. Procedural Safeguards Under Section 504

Procedural safeguards under the Section 504 regulation are stated more generally then in Part B. The Section 504 regulation requires the LEA to make available a system of procedural safeguards that permits parents to challenge actions regarding the identification, evaluation, or educational placement of their handicapped child whom they believe needs special education or related services. 34 CFR §104.36. The Section 504 regulation requires that the system of procedural safeguards include notice, an opportunity for the parents or guardian to examine relevant records, an impartial hearing with opportunity for participation by the parents or guardian and representation by counsel, and a review procedure. Compliance with procedural safeguards of Part B is one means of fulfilling the Section 504 requirements.[5] However, in an impartial due process hearing raising issues under the Section 504 regulation, the impartial hearing officer must make a determination based upon that regulation.

V. Conclusion

Congress and the Department have recognized the need to provide information and assistance to teachers, administrators, parents and other interested persons regarding the identification, evaluation, and instructional needs of children with ADD. The Department has formed a work group to explore strategies across principal offices to address this issue. The work group also plans to identify some ways that the Department can work with the education associations to cooperatively consider the programs and services needed by children with ADD across special and regular education.

In fiscal year 1991, the Congress appropriated funds for the Department to synthesize and disseminate current knowledge related to ADD. Four centers will be established in Fall 1991 to analyze and synthesize the current research literature on ADD relating to identification, assessment, and interventions. Research syntheses will be prepared in formats suitable for educators, parents and researchers. Existing clearinghouses and networks, as well as Federal, State and local organizations will be utilized to disseminate these research syntheses to parents, educators and administrators, and other interested persons.

In addition the Federal Resource Center will work with SEAs and the six regional resource centers authorized under the Individuals with Disabilities Education Act to identify effective identification and assessment procedures, as well as intervention strategies being implemented across the country for children with ADD. A document describing current practice will be developed and disseminated to parents, educators and administrators, and other interested persons through the regional resource centers, network, as well as by parent training centers, other parent and consumer organizations, and professional organizations. Also, the Office for Civil Rights' ten regional offices stand ready to provide technical assistance to parents and educators.

It is our hope that the above information will be of assistance to your State as you plan for the needs of children with ADD who require special education and related services under Part B, as well as for the needs of the broader group of children with ADD who do not qualify for special education and related services under Part B, but for whom special education or adaptations in regular education programs are needed. If you have any questions, please contact Jean Peelen, Office for Civil Rights (Phone: 202/732-1635), Judy Schrag, Office of Special Education Programs (Phone: 202/732-1007); or Dan Bonner, Office of Elementary and Secondary Education (Phone: 202/401-0984).

Footnotes:

1. While we recognize that the disorders ADD and ADHD vary, the term ADD is being used to encompass children with both disorders.
2. The Part B regulations define 11 specified disabilities. 34CFR §300.5(b)(i)(ii). The Education of the Handicapped Act Amendments of 1990 amended the Individuals with Disabilities Education Act (formerly the Education of the Handicapped Act) to specify that autism and traumatic brain injury are separate disability categories. See section 602(a)(2) of the Act, to be codified at 20 U.S.C. 1401(a)(1).
3. Section 300.505 of the Part B regulations sets out the elements that must be contained in the prior written notice to parents:

   (1) A full explanation of all of the procedural safeguards available to the parents under Subpart E;

   (2) A description of the action proposed or refused by the agency, an explanation of why the agency proposes or refuses to take the action, and a description of any options the agency considered and the reasons why those options were rejected;

   (3) A description of each evaluation procedure, test, record, or report the agency uses as a basis for the proposal or refusal; and

   (4) A description of any other factors which are relevant to the agency's proposal or refusal.

   34 CFR §300.505(a)(1)-(4).
4. Many LEAs use the same process for determining the needs of students under Section 504 that they use for implementing Part B.
5. Again, many LEAs and some SEAs are conserving time and resources by using the same due process procedures for resolving disputes under both laws.

APPENDIX B

1. **Section 504**
2. **Comparison of IDEA and 504**

Section 504 of the Rehabilitation Act of 1973
Preschool, Elementary and Secondary, and Adult Education

The Section 504 regulation applies to preschool, elementary, secondary, and adult education programs and activities that receive or benefit from federal financial assistance and to recipients that operate, or receive the benefit from federal financial assistance for the operation of, such programs or activities.

For purposes of public educational services, a qualified handicapped person is an individual with handicaps who is

- of an age during which persons without handicaps are provided such services,
- of any age during which it is mandatory under state law to provide such services to persons with handicaps, or
- a person for whom a state is required to provide a free appropriate public education under the Individuals with Disabilities Education Act (IDEA).

Each recipient that operates a federally assisted public elementary or secondary education program must provide a free appropriate public education to each qualified person in its jurisdiction, regardless of the nature or severity of the person's handicap. Recipients that operate a public elementary or secondary education program must also annually attempt to identify and locate unserved children with handicaps.

Provision of an appropriate education is the provision of general or special education and related aids and services such that:

- Educational services are designed to meet handicapped children's individual educational needs as adequately as the needs of nonhandicapped persons are met.
- Each handicapped child is educated with nonhandicapped children, to the maximum extent appropriate to the needs of the handicapped child.
- Nondiscriminatory evaluation and placement procedures are established to guard against misclassification or misplacement of students, and a periodic reevaluation is conducted of students who have been provided special education or related services.
- Due process procedures are established so that parents and guardians can review educational records and challenge evaluation and placement decisions made with respect to their children, and can participate and be represented by counsel in any subsequent impartial hearing.

Section 504 of the Rehabilitation Act of 1973
Preschool, Elementary and Secondary, and Adult Education

Provision of a free public education requires recipients that operate a public elementary or secondary education program to provide services without cost to the person who is handicapped, or to his or her parents or guardians, except for those fees imposed on nonhandicapped persons, parents, or guardians. It also means that, if a school district is unable to provide a child with handicap(s) with an appropriate education and places or refers that child to a program it does not operate, the district is still responsible for the costs of the program, including tuition, room and board, transportation, and nonmedical care.

An appropriate education could consist of education in general classes, education in general classes with the use of supplementary services, or special education and related services. Special education may include specially designed instruction in classrooms, at home, or in private or public institutions, and may be accompanied by such related services as developmental, corrective, other supportive services, including psychological counseling and medical diagnostic services.

Children with handicap(s) must also be afforded an equal opportunity to participate in nonacademic and extracurricular services and activities such as counseling, physical education, recreational athletics, transportation, health services, recipient sponsored clubs, recipient employment and assistance in obtaining outside employment. These services must be provided by the recipient in such manner as is necessary to afford students with handicap(s) an equal opportunity for participation.

Elementary and secondary school recipients operating preschool and adult education programs may not exclude qualified handicapped persons and must take into account their needs in determining the aid, benefits, or services to be provided under these programs or activities.

Recipients that operate a federally assisted private elementary or secondary school education program must admit qualified handicapped persons who, with minor adjustments, can participate in the general program. As an example, a private elementary or secondary school would not be permitted to exclude, on the basis of blindness, a blind applicant who is able to participate in the general program with minor adjustments. On the other hand, a recipient operating a private elementary or secondary school education program is not required to provide an appropriate education to a student with handicap(s) with special education needs if the recipient does not offer programs to meet those needs.

A Comparison of IDEA and Section 504

From *The Special EDge*, April/May 1994

Purpose

IDEA: To provide federal financial assistance to state and local education agencies to assist them to educate children with disabilities.

Section 504: To eliminate discrimination on the basis of disability in all programs and activities receiving federal financial assistance.

Who is Protected?

IDEA: All school-aged children who fall within one or more of 13 specific categories of disability and who, because of the disability, need special education and related services (i.e., mentally retarded, hard of hearing, speech or language impaired, visually impaired, seriously emotionally disturbed, orthopedically impaired, other health impaired, deaf, deaf-blind, multiple disabled, specific learning disabled, autistic, or traumatic brain injured).

Section 504: All school-aged children who have a physical or mental impairment which substantially limits a major life activity, have a record of such an impairment, or are regarded as having such an impairment . Major life activities include walking, seeing, hearing, speaking, breathing, learning, working, caring for oneself and performing manual tasks.

Provide a Free and Appropriate Public Education (FAPE)

IDEA: Requires FAPE be provided to only those protected students who, because of a disability, need special education or related services.

Defines FAPE as special education and related services. A student can receive related services under the IDEA if, and only if, the student is provided special education and needs related services to benefit from special education. Requires a written (IEP) document with specific intent and a required number of specific participants at the IEP meeting.

Section 504: Requires that FAPE be provided to only those protected students who because of a disability, need regular education accommodations, special education or related services.

Defines FAPE as regular or special education and related aids and services. A student can receive related services under Section 504 even if the student is in regular education full time and is not provided any special education.

Does not require a written IEP document, but does require a plan. It is recommended the district document that a group of persons knowledgeable about the student convene and specify the agreed upon plan of services.

Special Education vs. Regular Education

IDEA: A student is protected by IDEA if, and only if, because of a disability, the student needs special education.

Section 504: A student is protected by Section 504 regardless of whether the student needs special education.

Funding

IDEA: Provides additional funding for protected students.

Section 504: Does not provide additional funds. IDEA funds may not be used to serve students protected only under Section 504.

Procedural Safeguards

Both laws require prior notice to parents or guardians with respect to the identification, evaluation and/or placement of protected students. IDEA procedures will suffice for Section 504 implementation.

IDEA: Requires written notice and specific content to be included in the notice. Requires written notice prior to any change in placement.

Section 504: Does not require written notice. Requires notice prior to any "significant change" in placement.

Evaluation

Both laws require that tests and other evaluation materials be validated for the specific purpose for which they are used; be administered by trained personnel in conformance with the instructions provided by their producer; include those tailored to assess specific areas of educational needs; and be selected and administered to assure that the test results accurately reflect whatever factors the tests purport to measure.

IDEA: Requires informed consent before an initial evaluation is conducted. Requires reevaluation at least every 3 years.

A reevaluations not required before a change in placement. However, a review of current evaluation data, including progress monitoring, is strongly recommended.

Provides for independent educational evaluation at district expense if parent disagrees with evaluation obtained by school and hearing officer concurs.

Section 504: Same as IDEA.

Requires periodic reevaluations. IDEA schedule for reevaluation suffices.

Requires reevaluation before a significant change in placement.

No provision for independent evaluations at district expense.

Placement Procedures

When interpreting evaluation data and making placement decisions, both laws require districts to draw upon information from a variety of sources; assure that all information is documented and considered; ensure that the eligibility decision is made by a group of persons including those who are knowledgeable about the child, the meaning of the evaluation data and placement options; and ensure that the student is educated with his/her non-disabled peers to the maximum extent possible.

IDEA: An IEP meeting is required before any change in placement.

Section 504: A reevaluation meeting is required before any "significant change" in placement.

Grievance Procedure

IDEA: Does not require a grievance procedure, nor a compliance officer.

Section 504: Requires districts with more than 15 employees to designate an employee to be responsible for assuring district compliance with Section 504, and provide a grievance procedure for parents, students and employees.

Due Process

Both statutes require districts to provide impartial hearings for parents or guardians who disagree with the identification, evaluation or placement of a student.

IDEA: Contains detailed hearing rights and requirements.

Section 504: Requires notice, the right to inspect records, to participate in a hearing and be represented by counsel, and a review procedure.

Enforcement

IDEA: Enforced by the U.S. Office of Special Education Programs. Compliance is monitored by the California Department of Education (CDE). CDE resolves complaints.

Section 504: Enforced by the Office for Civil Rights

(Taken from *Meeting the Needs of All Students.* (1993). Olympia, WA: Washington Department of Education.)

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APPENDIX C

Final DSM-IV Diagnostic Criteria for ADHD

FINAL DSM-IV DIAGNOSTIC CRITERIA FOR ADHD

A. Either 1 or 2:

(1) *Inattention*: At least six of the following symptoms of inattention have persisted for at least six months to a degree that is maladaptive and inconsistent with developmental level:

(a) often fails to give close attention to details or makes careless mistakes in schoolwork, work, or other activities
(b) often has difficulty sustaining attention in tasks or play activities
(c) often does not seem to listen to what is being said to him or her
(d) often does not follow through on instructions and fails to finish schoolwork, chores, or duties in the workplace (not due to oppositional behavior or failure to understand instructions)
(e) often has difficulties organizing tasks and activities
(f) often avoids or strongly dislikes tasks (such as schoolwork or homework) that require sustained mental effort
(g) often loses things necessary for tasks or activities (e.g., school assignments, pencils, books, tools, or toys)
(h) is often easily distracted by extraneous stimuli
(i) often forgetful in daily activities

(2) *Hyperactivity-Impulsivity*: At least six of the following symptoms of hyperactivity-impulsivity have persisted for at least six months to a degree that is maladaptive and inconsistent with developmental level:

Hyperactivity:
(a) often fidgets with hands or feet or squirms in seat
(b) leaves seat in classroom or in other situations in which remaining seated is expected
(c) often runs about or climbs excessively in situations where it is inappropriate (in adolescents or adults, may be limited to subjective feelings of restlessness)
(d) often has difficulty playing or engaging in leisure activities quietly
(e) often talks excessively
(f) often acts as if "driven by a motor" and cannot remain still

Impulsivity:
(g) often blurts out answers to questions before the questions have been completed

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(h) often has difficulty waiting in lines or awaiting turn in games or group situations
(i) often interrupts or intrudes on others

B. Onset no later that seven years of age.

C. Symptoms must be present in two or more situations (e.g., at school, work, and at home.)

D. The disturbance causes clinically significant distress or impairment in social, academic, or occupational functioning.

E. Does not occur exclusively during the course of a Pervasive Developmental Disorder, Schizophrenia, or other Psychotic Disorder, and is not better accounted for by a Mood Disorder, Anxiety Disorder, Dissociative Disorder, or a Personality Disorder.

Code Based on Type

314.00 Attention-Deficit/Hyperactivity Disorder, Predominantly Inattentive Type: if criterion A(1) is met but not criterion A(2) for the past six months.

314.01 Attention-Deficit/Hyperactivity Disorder, Predominantly Hyperactive-Impulsive Type: if criterion A(2) is met but not criterion A(1) for the past six months.

314.01 Attention-Deficit/Hyperactivity Disorder, Combined Type: if both criterion A(1) and A(2) are met for the past six months.

Coding note: for individuals (especially adolescents and adults) who currently have symptoms that no longer meet full criteria, "in partial remission" should be specified.

314.9 Attention-Deficit/Hyperactivity Disorder Not Otherwise Specified: This category is for disorders with prominent symptoms of attention-deficit or hyperactivity-impulsivity that do not meet criteria for Attention Deficit/ Hyperactivity Disorder.

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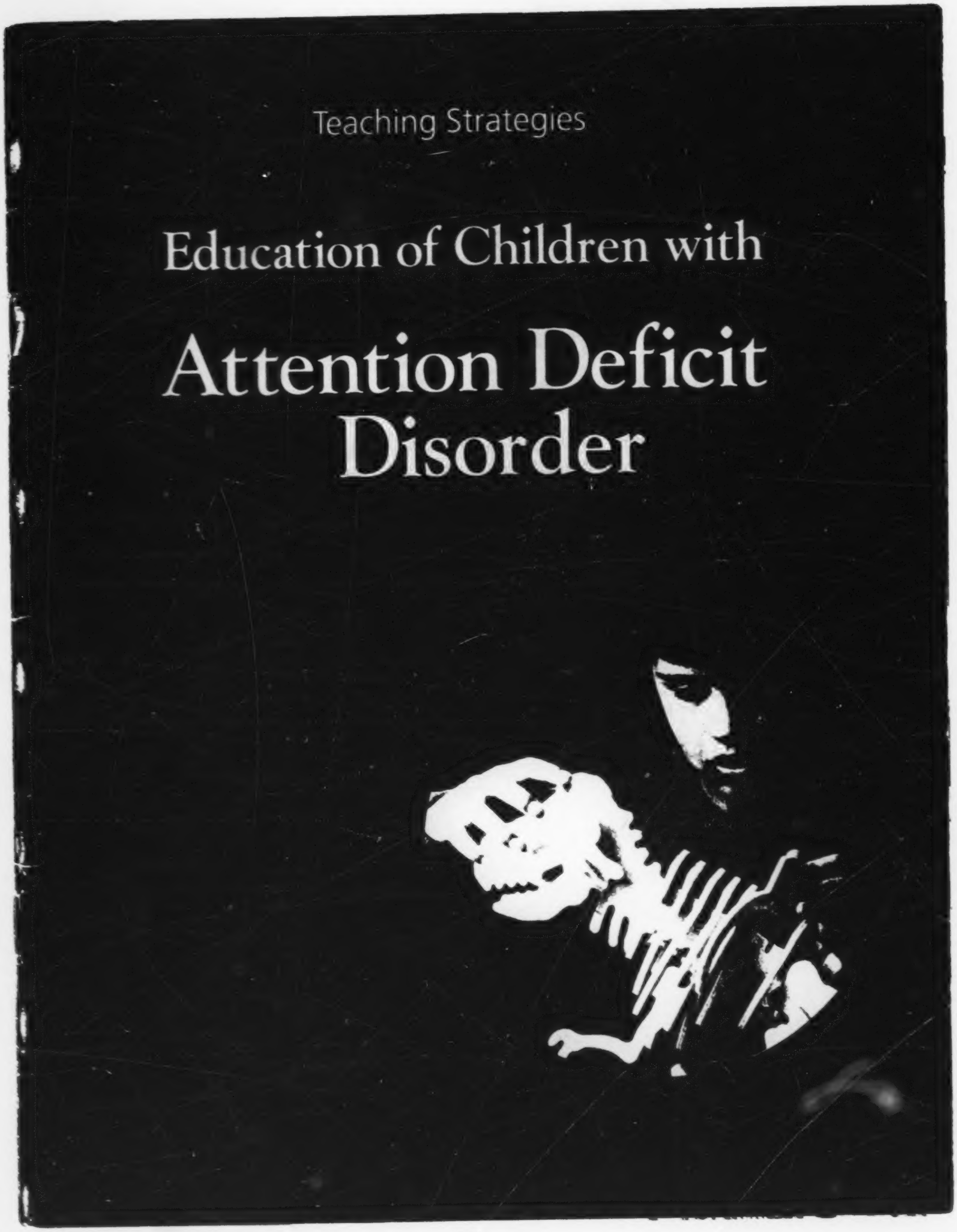
APPENDIX D

TEACHING STRATEGIES



Teaching Strategies

Education of Children with

Attention Deficit Disorder

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Credits

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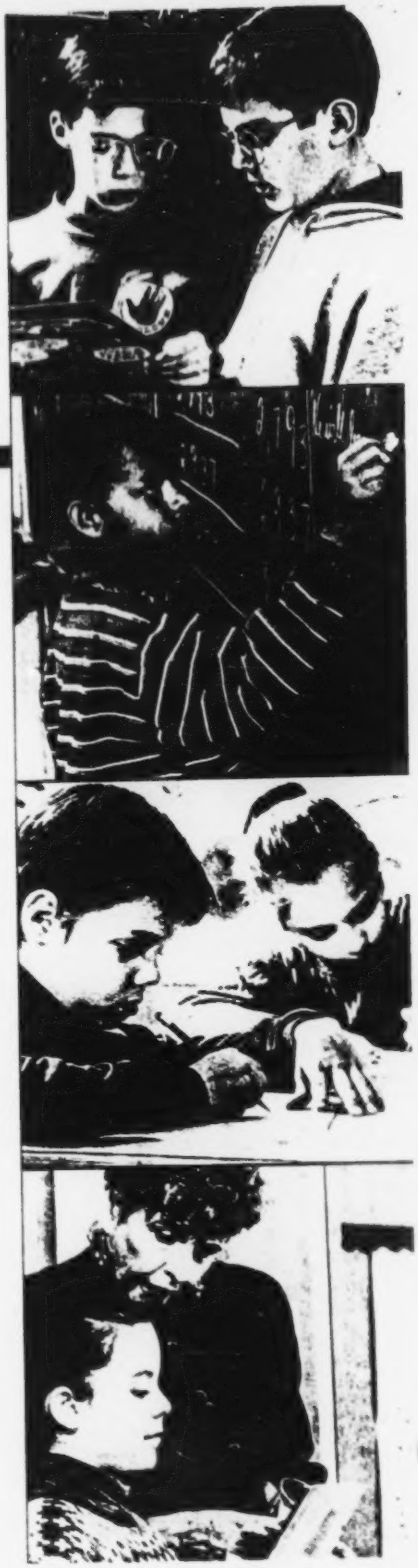
Teaching Strategies

Education of Children with Attention Deficit Disorder



Foreword

For many educators, teaching is an opportunity to "touch the next generation," to make a difference in the lives of children. Their daily efforts in the classroom are affirmed by the achievements that each student reaches for and attains. Often, however, the children who struggle most to achieve their potential are those for whom the skills and commitment of educators are most tested. This is the case for students with attention deficit disorder (ADD), whose efforts are often stymied by their outbursts or distractions. The strategies presented in this booklet have been developed to enable you to help a child with ADD succeed.

From identification to intervention, the information you need is put forward in thoughtful plans tried and tested by other educators. These practices suggest ways to build on students' strengths and work around their weaknesses. There are helpful tips that you can use to adapt classrooms and teaching strategies to increase the odds of success for children with ADD and others who are distractible, or have difficulty concentrating or sitting still.

We were encouraged to find that many of the intervention strategies are simply good education practices. This is especially important as 70% of children with disabilities are taught primarily in the regular classroom. The strategies highlighted in this publication, while based upon the best available research and practices about teaching children with ADD, have potential to benefit other students as well.

We hope that you are able to use this book to enhance your own classroom strategies so that all students and especially those with ADD can learn and flourish regardless of the obstacles they may face.

Ellen Schiller Jane Hauser

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Understanding Attention Deficit Disorder

①

Although Angel's teacher has in place a well-structured classroom management system and uses instructionally appropriate methods, Angel rarely finishes his work. At 8 years old, Angel has difficulty staying seated without sliding off his chair. He is constantly on the move, and his path is strewn with overturned objects and fallen materials. Quick to argue and slow to calm down once excited, Angel has yet to learn how to get along with his classmates. He solves problems by pushing and bumping or throwing things

Jeffrey sits at his desk staring at the wall. It isn't that he refuses to do the work — in fact, he is a friendly and bright youth — it's just that he doesn't seem to notice that the class has moved on to another assignment or that he hasn't completed the previous one. When the teacher directs his attention back to the task, Jeffrey shuffles through his notebook, unsure of what he is looking for.

Understanding ADD

You can't say that Rebecca doesn't try. An able and hard-working child, she is constantly asking for help and encouragement from the teacher. The problem is, she has difficulty focusing on her work, which leads to excessive questions and requests for assistance. It seems as if every time the teacher turns around, Rebecca is standing there waiting for direction.

Although many students have characteristics that occasionally interfere with their learning, there are some students whose problems require a closer look. Some students like Angel, Jeffrey, and Rebecca might have attention deficit disorder (ADD), while others do not. This booklet is about students with attention deficit disorder and what you can do to support their classroom learning.

Students with attention deficit disorder — or characteristics that include attention difficulties, hyperactivity, and impulsivity — have always challenged even our best classroom practices. Their behaviors too often interfere with typical classroom instruction, resulting in lost learning opportunities and underachievement. In social situations, they tend not to fare much better, because their peers generally find it difficult to get along with them.

What can you do? Over the past few years, we have learned much about serving the educational needs of students with attention deficit disorder. Educators have taken the lead in modifying instructional practices, structuring classroom learning environments, and managing classroom behaviors in ways that lead to success for a wide diversity of students. And, what's more, in doing so they have found that many of the practices that work with students with attention deficit disorder can be beneficial to other students as well. The purpose of this booklet is to share with you some of those practices teachers are using at the elementary and middle school levels.

Defining Attention Deficit Disorder

There are no known causes of attention deficit disorder; however, researchers are investigating the following:

- Heredity or genetic causes.
- Biological or physiological
- Complications or trauma during birth.
- Lead poisoning.
- Prenatal alcohol and drug exposure.

Children identified as having attention deficit disorder are a heterogeneous group of youngsters who have serious problems with inattention, distractibility, and impulse control. Developmentally inappropriate levels of overactivity frequently exist with this disorder. It is estimated that approximately 3%-5% of school-aged youngsters have an attention deficit disorder.

What appears to be an attention deficit disorder might actually be another problem, making diagnosis critical. Attention deficit disorder can coexist with other conditions such as specific learning disabilities and emotional/behavioral disorders.

Sometimes you will see the term ***attention deficit hyperactivity disorder*** used to identify this group. Professionals who do not use this longer form remind us that not all children with attention deficit disorder display hyperactivity. For the purpose of this booklet, both terms will be used interchangeably.

Keep in mind that labels do not define a child; they merely define a set of characteristics that describe the disorder. What you do instructionally with this knowledge of characteristics is key in helping the student succeed in your class.

Teachers Can Make an Important Contribution to the Student's Education Program

Typical characteristics exhibited by children with attention deficit behavior such as inattention, overactivity and impulsivity, if left unchecked, can lead to myriad problems in the classroom. Teachers note that students with attention deficit disorder display difficulties completing their work, staying on task, and responding accurately to tasks. These behaviors tend to be persistent, occurring across settings and tasks. Behaviors associated with attention deficit disorder that interfere with academic tasks and thus need to be managed include:

- Leaving one's seat without permission.
- Making noises.
- Talking out during quiet time.
- Having difficulty staying on task.

A number of children with attention deficit disorder are also noncompliant and display behavioral or social problems in the school setting. You may find that some of these students behave aggressively toward peers and teachers.

Most districts have found that students with attention deficit disorder can be educated successfully in a regular program with the help of appropriate school-based interventions. Providing services to students with attention deficit disorder in the general education classroom reduces the stigma of special education and may even enhance the social status of these children. At the very least, it allows students to observe appropriate peer models.

Viewed from this perspective, classroom teachers can significantly affect a student's education by how they identify and implement appropriate adaptations and interventions. As you read through this booklet, keep in mind that you are not alone in helping children with attention deficit disorder learn and achieve. Most likely, you will find yourself working with other professionals who can help you develop, implement, and evaluate effective practices.

When teachers ask how they can best contribute to the student's educational progress, one answer is through effective classroom practice. Effective practice with students with attention deficit disorder requires knowledge about how to match school requirements to the student's characteristics. It also requires an understanding of relevant medical issues such as whether the student is taking medication and what effects that might have on his or her classroom performance. Combine this knowledge with a solid grounding in instructional strategies, applied behavioral management techniques, and a commitment to building family relationships, and you have the basics for a strong educational program.

Next Steps

This booklet is designed to be a quick reference on practices that educators are currently using to help students with attention deficit disorder succeed. The practices described here are drawn from a larger study completed in 1993 by the Federal Resource Center at the University of Kentucky under the auspices of the U.S. Department of Education, Office of Special Education Programs (OSEP). Information has also been gleaned from the work of four other OSEP centers (Arkansas Children's Hospital, University of Miami, Research Triangle Institute, and University of California-Irvine), which were charged with synthesizing current research knowledge on assessment and interventions for meeting the needs of children with attention deficit disorder.

The practices, which focus on matching the learning characteristics of students with attention deficit disorder with the school setting, are intended to be easily replicated. We hope that you will find them useful in fostering the educational progress of your students.

Getting Help for Students ❷

You're concerned about a child in your class. What now? Sometimes parents will initiate discussion about their child. They will want to know if the behaviors they have noticed at home are also apparent at school. But much of the time, it will be teachers who identify student behaviors that suggest an attention deficit disorder. Typically you or one of your colleagues will be the first to notice the student's lack of success with school assignments or problems with peer relationships. You might notice such behaviors as:

- Failing to finish work.
- Seeming not to listen.
- Appearing easily distracted.
- Having difficulty organizing work.
- Speaking out frequently in class.
- Requiring close supervision.

- Having difficulty sitting.
- Fidgeting.

All youngsters will exhibit these behaviors to some degree in certain situations. For very young students, the behaviors are typical developmentally. But for students with attention deficit disorder you might find that the behaviors tend to be exhibited more frequently and with more intensity. When any combination of these behaviors persists over time, occurs across settings and tasks, and chronically interferes with the student's classroom success, it is a good idea to investigate further.

Classroom Teachers Play a Key Role in Identification

How can I tell if my student has an attention deficit disorder? Who is there to help me if I suspect that my student has an attention deficit disorder?

The first step in identification is being clear as to what attention deficit disorder is and what it is not. Although the case can be made that it is more important to know how to teach a child than it is to know his or her label, teaching can be enhanced with a greater understanding of the disorder.

Attention deficit disorder is a relatively new term. It has only been in recent years, specifically with the research syntheses funded by OSEP, that a unified body of knowledge about attention deficit disorder has emerged. Thus, it is no wonder that the disorder is fraught with misunderstanding and lack of public knowledge.

Knowing as much as possible about the characteristics of attention deficit disorder and its diagnosis will assist you in working with the child. If you do not feel well versed on the topic, then ask for help. School psychologists, the school nurse, your principal, and special education support staff can provide you with information or point you in the right direction (see also Chapter 7 in this booklet for further readings). Ask about possible conferences and workshops you might attend.

Some districts have created manuals and booklets that serve as guideposts for understanding attention deficit disorder. Find out whether your district has produced such a guide — and if not, recommend that they do!

For example, school professionals in Raleigh, North Carolina, took seriously the charge to make information available when they authorized an ad hoc group to develop the *Attention Deficit Disorder Screening Procedures Manual.* The manual was eventually distributed to staff throughout the district. It includ-

Try This

Help parents feel better prepared for meetings by providing them in advance with a brochure explaining attention deficit disorder.

Jefferson County Public Schools, Kentucky

ed the following information:

- Recommended screening procedures for attention deficit disorder.
- General information on attention deficit disorder.
- Classroom intervention and strategies.
- Recommended home and school behavior rating scales.

Understand the Purpose of School-Based Referral

School teams of qualified professionals, on which medical professionals often serve, are usually responsible for identifying students with attention deficit disorder. Keep in mind that educators should not attempt to diagnose attention deficit disorder **medically**. Rather, the educational staff determines on the basis of the school-related data collected whether or not there is a significant problem that requires specific educational accommodations. This frame of reference should lead to a thorough investigation by a designated team into the reasons why a child might be exhibiting certain behaviors. In most cases, there will be numerous reasons, all of which need to be investigated formally and informally before referral to a physician.

As the student's teacher, you have critical information to assist in this process. Therefore, it is important that you focus your efforts on collecting information that will be useful in planning appropriate educational programs and approaches for the child.

Collect Information That Is Educationally Useful

Imagine that you are faced with collecting information on a child who is suspected of having an attention deficit disorder. What information can you collect that will be most useful? The key is to generate sound information that can be used to design classroom interventions and support any medical treatment program that the child might be receiving. (For more information on what you can do if you have a student on medication, see Chapter 3.)

For example, in Sturgeon Bay, Wisconsin, if classroom observation reveals a possible attention deficit problem in a child, teachers begin assessment proceedings by following a process designed to gain information from all who are involved with the child — for example, teachers, parents, and the school psychologist. This process also serves the purpose of increasing everyone's understanding of the student. The process includes the following steps:

- **Review student files**. Look to see whether others have

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noticed similar problems. Check out any previous school testing, including screening for vision and hearing problems.

- **Share your observations with parents or family**. Discuss with the student's primary caretaker your observations and find out whether these behaviors occur across settings.
- **Follow through on suspected health problems**. If your research leads you to suspect that a health problem might exist, talk to the family about getting the child a physical check-up. Or, you might need to consult with school health professionals should it become necessary to have the student referred to the public health department for screening.
- **Consult with other school personnel**. It is always a good idea to pool your information with that of other professionals. Think about tapping the expertise of the guidance counselor, school psychologist, or special education teacher. If your school has a teacher support team, seek out its advice as well. Invite specialists to observe the student in your classroom.
- **Plan for interventions**. No matter what the outcome of your findings, don't wait to start devising a classroom plan to accommodate the student's learning needs. Include the student's parents, your principal, and other school personnel as appropriate in helping you design success strategies. Keep detailed accounts of your efforts; they may prove useful in helping you sort out what works for the student and in making recommendations to other professionals.

From this process, teachers learn a great deal about the student, not to mention how classroom practices might be enhanced. Using such a system can move you and your colleagues forward in suggesting well-formulated educational plans.

Formal Assessment

In some cases, formal assessment might be undertaken. What should you expect?

Most districts have their own system or set of procedures for assessment. Find out what referral and assessment procedures are in place in your district. Most often, these procedures will be in compliance with the *Individuals with Disabilities Education Act* (IDEA) or *Section 504 of the Rehabilitation Act* of 1973 guidelines, so it is important that they be explicitly followed.

Typically, assessment will be

Getting Help

multifaceted and include:

- Classroom observations.
- Results of all interventions that have been tried.
- Completion of checklists and questionnaires by teachers and parents.
- Psychological evaluation.
- Academic evaluation.

You might be called upon to complete some of these assessments. At the very least, you should plan on discussing the assessment results with other school professionals and the student's parents.

What do the results tell you in terms of setting up your instruction to better meet the student's needs? What insights about the child's characteristics were gleaned that you can put to use in adapting and modifying your instruction and organizing your classroom? While there might be further discussion at this time about next steps to take (e.g., referral for further diagnosis, referral to special education), you can use this new information in crafting lessons for the student.

A Team Effort

You are not alone; in fact, good practices show that identifying and designing classroom interventions for students who have or are suspected of having attention deficit disorder work best with a team effort. At the very least, you will want to seek out the advice of other professionals in your building. As part of a prereferral team or teacher assistance team, you will be part of a group decision-making body charged with the task of evaluating the assessment data. Some of you will eventually become part of (or work with) child study teams — formal groups who design and monitor intervention programs for students identified as having attention deficit disorder.

As you work with these other professionals, don't hesitate to ask their opinions about how best to help a child with attention deficit disorder. One of their ideas just might be what you need to make a significant difference in your student's progress.

Ideas for Working on a Team

A well-designed process or protocol can help groups stay on track and make collective decisions that follow a logical progression. Using such an approach, data are collected and organized according to key decision points, such as those used by the Anchorage Public Schools. In that district, the child's educational history and cumulative file is screened first, followed by a discussion of the interventions that have been tried and a review of the teach-

Try This

Streamlining multidisciplinary team evaluations can be a challenge, especially when several people are being asked to collect data or complete different forms. Avoid delays and duplication of effort with prepared packets, complete with cover letters and forms that only need the originator's signature.

Norwich
Public Schools,
Norwich, CT

er's rating scale. If there is a history of poor performance, ***and*** reasonable accommodations have been tried with unsuccessful results, ***and*** informal measures suggest that more formal assessment might be warranted, ***only then*** does the group consider a formal evaluation. If these three elements are not consistent, then it is up to the group to ascertain other reasons that might explain the student's behaviors.

Moving Ahead

Your work will be guided by the identification and evaluation phase. Now begins the ongoing process of identifying the student's characteristics and needs, matching them to effective classroom practice, and evaluating progress. Regardless of the outcome of the identification and screening process, ***use*** that information in designing quality lessons and in delivering effective instructional presentations.

Working with Students on Medication Programs

3

You will probably find that a fair number of your students — roughly 60% to 90% — who have been diagnosed with attention deficit disorder will be on a medication treatment program. What does this mean for you and the success of your classroom?

First, the student's parents and physician will decide whether or not the child is to receive medical treatment. While it is not your role to advise either way, when working with a student who is taking medication, your role becomes one of providing information to the designated professional (e.g., school psychologist, school nurse) who monitors the medication program. Because of your close daily working relationship with the student, you are in a position to observe behavioral indicators of whether or not the student is responding to the medication program in the intended ways.

When working properly, medication has the effect of temporarily reducing the symptoms of attention deficit disorder (inattention, impulsivity, hyperactivity) while increasing concentration and goal-directed effort. Medication does not directly affect academic performance. In other words, medication does not teach the child!

It is your role to be aware of the issues in medicating children and to cooperate as appropriate. Teachers need to:

- Understand the role of medication in a child's treatment/intervention program.
- Be involved in close observation of the child's classroom behavior and performance.
- Be in communication with parents and physician when appropriate.
- Help monitor whether the child is receiving the medication as prescribed and on time.

Medication as a Treatment

A number of children with attention deficit disorder respond positively to stimulant medication. The purpose of this medication is to enable children with attention deficit disorder to focus their attention and behavior. When working properly, the medication controls certain behaviors that interfere with the child's academic learning and progress. It is important to note that other problems may exist that will not be affected by medication.

The choice of medication will depend on the student's symptoms and response to the treatment. For practical purposes, stimulant medication refers to a class of drugs that includes the brand names of Dexedrine, Ritalin, and Cylert. A secondary category of medication, antidepressants, might also be used with some students.

If the medication program is working, you should expect to see the child become less distractible; more able to concentrate; and more attentive. For those children who have associated behavioral difficulties such as aggression and inappropriate social interaction, you might also observe a decrease in disruptive behaviors.

Possible side effects are the major drawback of treatment with medication. These side effects might take the form of decreased appetite, insomnia, or motor and verbal tics. Mood swings or irritability can occur when the drug is wearing off. For the most part, physicians manage side effects by adjusting the child's medication dosage. If you observe any of these or what appear to be other side effects, it is important that you contact the school authorities assigned to the student. In fact, ***whenever*** you have any concerns about behavior changes, report them to the school principal or other district-designated professionals.

Monitoring Dosage

It is important that school professionals administer the medication on time and in the correct dosage and that teachers know the student's medication schedule. Why is this so important?

With Ritalin, the peak action of the drug usually occurs approximately 2 hours after the student takes it; its effects dissipate after 4 hours. Some children experience aggressive, emotional or impulsive behavior when the medication's effects wear off. Therefore, if the drug is not given on time, there is a good possibility that the child will have difficulty. Keep in mind that if the drug is given late, it will take at least 30 minutes for the effects to take hold. In other words, the student will have lost at least 1 hour of valuable instructional time!

Most children with attention deficit disorder cannot remember to take their medication without reminders. Please respect confidentiality when reminding the student.

Students on Medication

Communicating with the Family

Be aware that there continue to be controversies about the use of stimulant medication. Chances are that parents have wrestled a long time with the decision to medicate their child. They have been apprised of the side effects and drawbacks and have used their best judgment in pursuing the treatment. They need to know whether the medication is having the intended effect on their child at school. Thus, it is important that you serve the critical role of ***objectively*** communicating to them the results of their decision on the child's behavior and whether improved behavior is resulting in better academic performance.

School personnel, including the school psychologist and school nurse, should observe and report to the family and physician changes in the student's behavior and academic performance associated with medication. Find out what procedures are in place in your district for monitoring medication treatment programs.

For example, some districts ask teachers to provide baseline data on the student's behavior or academic performance (or both) to parents, the school psychologist and/or nurse, or directly to medical personnel ***prior*** to their making the decision about medication. This data might be used later as a baseline against which the effects of the medication on behavior are compared. If one of your students is being referred for medical diagnosis, help provide accurate data. Identify your student's most significant interfering behaviors and keep track of their occurrences over a week's time. For example, keep a folder with samples of the student's work for later comparison. Note the date and amount of time it took the student to complete the work. Anecdotal information such as time of day and any special occurrences (e.g., a fire drill prior to the assignment) can be included to help make the work samples more understandable.

After the decision has been made to start a student on medication, you might also be called upon to document its effects on the child's behavior and long-term academic performance. Find out whether your school district has a procedure in place for recording and collecting information on student progress, and whether there is a liaison between your district and medical profession. If your district has a procedure in place, find out how you can contribute to making the process work. Ask your principal to review district procedures and communication networks with you.

For example, the Rowan-Salisbury School District, Salisbury,

Try This

Suggest that your school district form a collaborative team between school staff and physicians in the community who treat attention deficit disorder. In return for current and relevant student data provided by you and other staff, physicians agree to meet periodically to discuss best ways of meeting student needs.

Rowan-Salisbury
School System,
Salisbury, NC

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North Carolina, has a system for providing physicians with a packet of information containing an outline of the child's problems as perceived by the school and a summary of collected data as support. These packets also include the student's scores on attention deficit disorder checklists and rating scales, a brief school history, a release of information form, a medical report form, and a self-addressed stamped envelope so the physician can report to the school information regarding any medical treatment and follow-up. In this example alone, there are numerous opportunities for teachers to contribute valuable information. If nothing else, these packets should provide you with helpful information about the child that you can use to plan classroom instruction.

Once a student is placed on medication, it is up to you to help monitor the student. Is the student experiencing fewer behavioral problems and participating more productively in class lessons? For example, in Kenosha Unified School District No. 1, Kenosha, WI, teachers complete a medication follow-up report and send it to the physician two weeks after medication is started or changed. A copy is also sent to the parents. On the form, the teacher checks off any side effects that he or she has noticed and notes any behavioral fluctuations in impulse control, attentiveness, or physical activity level that have been observed. Academic and social performance is also summarized.

Medication Is Only Part of the Answer

Regardless of whether a medical management plan is agreed upon between the parents and the physician, the child's learning and/or behavior problems still require school-based interventions. A medical diagnosis is not necessary to institute specific classroom accommodations.

Medication does not control the child. If properly administered it should filter out distractions, allowing the child to focus on the task at hand. Capitalize on this opportunity to help the student progress.

Try This

Ask your school district to develop a physician evaluation form containing the following information: the child's diagnosis, medication prescribed, if any, dosage time, need for further evaluation, and other diagnosis and treatment. Request that physicians fill out one of these forms for each student.

Wake County
Raleigh, NC

Teaching Students with Attention Deficit Disorder

4

No two children are alike. There are multiple approaches to working with children in the classroom, which is why the teacher's role is so important. Identifying what can be done to support and strengthen the student's learning ability is ultimately what makes the difference in whether the student progresses or not.

Effective classroom programming requires knowledge about attention deficit disorder, a solid grounding in behavioral management, skill in instructional design, and an awareness of the disorder's medical components. This understanding is enhanced when strong relationships are built between professionals and families.

When designing lessons that address the characteristics of students with attention deficit disorder, you will probably need to make some changes in how you plan, organize your instruction, manage the classroom, and arrange the physical layout of the room and materials. Students with attention deficit disorder do best in a structured classroom — one where expectations and rules are clearly communicated to them and where academic tasks are carefully designed. Interactive teaching strategies are needed to keep these students attending to tasks. Since these are basic principles of effective teaching, you will find that when applied, they will have a positive effect on the learning of ***all*** students.

Planning for Success

Children with attention deficit disorder have learning characteristics and needs as diverse as those of other children in your classroom. As such, no single educational setting, practice or plan can be uniformly prescribed for these children. Students with attention deficit disorder vary in their characteristics and needs, and schools vary in their access to resources. Plans should, at a minimum, identify students' characteristics and special learning needs and provide sound ideas for strengthening their academic and social performance.

In your planning, stress short- and long-term goals rather than "quick fix" ideas and "tear down the door" methods. Many districts have found that planning results in more effective practice when teaching strategies and interventions are linked to desired behavioral goals.

Planning can also be enhanced when it is done as a team effort. In Fort Lauderdale, Florida, parents, teachers, and support professionals prepare district ***accommodation plans*** for students who are being considered for Section 504 services. These plans contain specific modifications that need to be made, if any, in the physical arrangement of the classroom, lesson presentation, work assignments, test-taking methods, and classroom management system. The plans specify who will make which accommodations, and in what time frame.

Modifying Instruction

You will probably find that most of your students with attention deficit disorder tend to benefit from some type of instructional modification, which is the cornerstone of helping students with attention deficit disorder succeed in the classroom. When modification is used, students are not penalized for not knowing how to learn.

There are many ways you can modify your lessons. Target those aspects of the learning setting that can be most troublesome for the student:

- Lesson presentation.
- Physical arrangement of the classroom.
- Work assignments.

Lesson Presentation

Use the principles of effective instruction when delivering lessons. Make sure that students are successful and challenged. Model cognitive strategies such as "think aloud" techniques which help students verbalize the thought processes they should engage in to complete the task. Cooperative groupings can also be used effectively. Finally, give praise and feedback immediately and consistently.

Suggestions for maintaining student involvement in the lesson include the following:

- Keep lesson objectives clear.
- Deliver the lesson at a brisk pace.
- Encourage collaboration among students.
- Use meaningful materials and manipulatives.
- Prompt for student answers after allowing at least 5 seconds of wait time.
- Have the students recite in unison.
- Vary your tone of voice and model enthusiasm.

There are additional ways you can accommodate the student's learning characteristics and needs when designing your lessons. For example, if the student has a short attention span, you might accommodate this learning characteristic by modifying the ***length*** of the material. The following are examples of additional accommodations:

- Break up long presentations by "chunking" content. At the end of each chunk, have the student respond in some way.
- Provide the student with additional time to finish an assignment or test.
- Break down assignments into "mini-assignments," and build in reinforcement as the child finishes each part. So as not to overwhelm the student, consider passing out longer assignments in segments.
- Reduce the number of practice items that the student must complete. For instance, allow the student to stop once he or she has demonstrated mastery.

Holding students' interest and attention is not always an easy task. Don't hesitate to experiment with a variety of approaches — and ask your colleagues for ideas.

Physical Arrangement of the Classroom

To help a student who is easily distracted focus on the task at hand, you may need to reduce competing stimuli in the environment or directly cue the student's attention. The goal here is not to create a dull environment, but rather to find ways to focus the student's attention. The following are examples of things you can do:

- Seat the student away from high-traffic and noisy areas such as the pencil sharpener, window, hallway, and materials table. Make available a study carrel.
- Define the work space for the child. For example, when children are to sit on the floor, use carpet squares to help define each child's space.
- Reduce the amount of materials present during work time by having the student put away unnecessary items. Have a special place for tools, materials, and books.

Work Assignments

Because many students with attention deficit disorder are inefficient learners, it is a good idea to spend some time helping them develop learning strategies. Organizational strategies are a must for students with attention deficit disorder. Help them get into the habit of making reminders of what they need to do, using such strategies as assignment sheets, daily schedules, and "to do" lists.

A teacher in Suffield, Connecticut, designed a daily checksheet for students to keep track of assignments, grades, and targeted behaviors. Here's how it works. The first column lists all of the

Try This

Use dot-to-dot pictures for charting student progress. For added value, present students with a bonus when they reach designated points.

Sandy, Utah

student's classes. Next to it is a column for the student's grades. The next column features criteria (e.g., is on time for class, came prepared with appropriate materials, participates in instruction and discussion, completes homework, etc.). A space is left for the student to write in homework assignments. At the end of the day, the student reviews the checksheet and uses the data on it to determine what to take home for study purposes. Parents are expected to review and sign the checksheet daily.

Daily checksheets such as the one just described enable you to maintain an active record of student progress. These checksheets also assist the student by clarifying expectations and highlighting successes.

Teach older students how to take notes from both oral presentations and textbooks. Help the student by listing the main ideas or concepts in advance. Some teachers have found it helpful to give their students a template graphic organizer to use when outlining and taking notes.

Other tactics that teachers have used to help students focus in on the task at hand include the following:

- Use color coding or highlighting to help focus attention on critical information contained in assignments.
- Give clear directions both orally and visually. Whenever possible, provide the student with a model of what he or she should be doing.
- Set up consistent routines for making the transition between lessons, getting and putting away materials, and requesting assistance. Teach these routines and reward students for following them.

Managing the Classroom

A strong classroom management system helps ***all*** students develop positive classroom behavior, study habits, and organizational skills. For students with attention deficit disorder, these behavioral management systems often provide the structure they need for managing their own behaviors on a daily basis.

At a minimum, you can provide the essential foundation for improving behaviors and promoting student success by maintaining an orderly classroom environment that is predictable. Establish clear rules and state them in positive terms so that students know what is expected of them.

Helping the Student Manage Behavior

Explicit attention to reducing the incidence of problematic behaviors is essential for students

Try This

Take photographs of your students engaged in identified positive behaviors. Display with rules.

Des Moines, Iowa

with attention deficit disorder to reach their academic potential. For years, teachers have applied behavioral management techniques such as positive reinforcement, negative reinforcement, and response contingencies in their classrooms with positive results. The key is to be ***consistent*** in applying positive and negative consequences.

Positive Reinforcement. You will probably find that many students with attention deficit disorder benefit from a structured reinforcement system. Let the student know what behaviors will be rewarded. Select reinforcers that are of interest to the student. Rewards don't necessarily need to cost a lot of money; for example, an image made with an ink pad, a trophy or a stuffed animal that sits on the student's desk, or a visit with the principal, might have appeal to younger children. Older students tend to appreciate special privileges such as free time or time at the computer station. Remember, as students become proficient in displaying appropriate behaviors, you can begin to phase out reinforcement by decreasing its frequency.

Negative Consequences. When you must use negative consequences to reduce the frequency of a troublesome behavior — for instance, strategies such as planned ignoring, time out, loss of privileges, and reprimands — keep in mind that such practices should always be paired with reinforcement for an appropriate alternative behavior. Students need to know what they ***should*** be doing, as well as what will not be tolerated.

Response Contingencies. Token economy systems are widely used classroom management systems that have promising results for students with attention deficit disorder. A token system is based on tokens that can be exchanged for reinforcers, contingencies that specify the conditions under which the tokens may be obtained or lost, and exchange rates for tokens. Many token systems use points.

For example, students in Irvine, California earn daily points for positive behaviors such as following quiet rules, following seat rules, maintaining appropriate peer relations, attending to class lessons, and completing work neatly. Points are subtracted for negative behaviors. As students become proficient at demonstrating positive behaviors, the intervals for receiving rewards increase. This school based reward system is administered by counselors during the last 20 minutes of the day.

Elementary-aged youngsters in Bradenton, Florida experience a five-level point system that assists teachers in monitoring and rewarding appropriate behavior such as following rules and participating in lessons. The system works this way:

Try This

A designated notebook makes it convenient to record daily homework assignments. Teachers review the notebook before it is sent home for parent perusal.

Lake Villa, Illinois

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- Each student starts at level 1. To move up to succeeding levels, the child must meet certain behavioral expectations every day for a month.
- At each succeeding level, privileges are increased.
- At the end of the day, students discuss their behavior. A daily report card is sent home, and a graph is used to chart students' progress.

Another variation of a point or token system focused on increasing student work completion is a tic-tac-toe game developed by a school psychologist in Sandy, Utah. The game consists of a specially made tic-tac-toe card (8 1/2- by 11-inch card with nine pockets for holding the tokens), tokens, reinforcements, and progress charts. Each square on the tic-tac-toe board has a number, that corresponds to a number on a token. The object of the game is to place three tokens in their pockets across, down or diagonally on the playing card. Numbers representing units of work to be completed (e.g., number of questions to answer or pages to read) are also printed on the tokens. Here is how the game is played. The student draws a token and completes the amount of work indicated. Once the work is completed, the student matches the token to the square on the card. This process continues until the student has achieved a "win." To keep motivation high and to show the students' progress, charts are kept.

Charting progress can be not only reinforcing but also fun. In Sandy, Utah, "magic grids" add the element of surprise to reinforcement. The "Magic Grid" is a nine space grid with the numbers 1 through 5 listed at the top of each space. In each space a reinforcement has been written in invisible ink. Students randomly select a space and tally points in that space. When a student has earned all of the points for that square, the secret message is revealed. Another variation is the "Stairway to Success" chart. Students earn points toward each stair, receiving a reinforcement when they reach the top.

Learning New Behaviors

When helping students learn new behaviors such as positive social skills, teachers can use a combination of instructional strategies, including:

- Modeling.
- Rehearsing appropriate behavior.
- Role playing.
- Continuous reinforcement.
- Prompting.

"Target Behavior of the Day" is a practice used in Jacksonville, Florida, that helps students think about good classroom behavior

Try This

Have students draw cards with rewards printed on them to add an element of "chance" to your reinforcement system.

Omaha, Nebraska

on a daily basis. At the elementary level, teachers introduce this practice by asking students to make a list of specific behaviors that are desirable in the classroom such as raising your hand, listening when others talk, waiting your turn, speaking with an inside voice (i.e., using a low tone of voice inside, even though louder voices can be used outside on the playground), and cleaning up your area. These behaviors are then written on large strips of posterboard and displayed — one each day — on the "Target Behavior of the Day" bulletin board. During the day, the teacher records a mark on a tally card each time a student displays the behavior. At day's end, the teacher recognizes students who have modeled the behavior. For older students who need more challenge, this technique can be adapted by listing ***all*** of the desired behaviors and keeping the targeted behavior a secret from the group until the end of the day.

Try This

Give ***Good Slips*** to students when they demonstrate desired behavior. The slips can be turned in for rewards. Those students who earn more than the required number needed for a reward can enter a special drawing for a bonus prize.

Kenosha,
Wisconsin

Providing constructive feedback to the student is important. Middle school teachers in Lake Villa, Illinois, have come up with an approach to helping students demonstrate positive academic and social behaviors. Each Friday, teachers write a brief progress report on the students, describing the students' behavior, effort, classroom performance, homework completion, and present grade point average. Before leaving school, the students collect the reports and meet with a designated adult to discuss the comments. During this meeting, the students and adults work together to problem solve and suggest alternatives where needed.

Verbal prompting has also been found to help students better understand the requirements of their environment. In Des Moines, Iowa, teachers help ease transition — generally a very difficult time for many students with attention deficit disorder — by telling the student when there are "2 minutes to go before..." Even with young students who might not comprehend time, the cue helps to orient the child to the approaching change.

Enlisting Colleagues' Support

Some students will demand more attention and understanding. At these times, consider enlisting the help of your colleagues — either individually or on teams — in supporting the student's behavioral growth.

In Irvine, California, teachers find it helpful to come prepared to team meetings with the following information about the student's behavior:

- Statement of problem behaviors
- Desired alternative behaviors.

- Previous attempts at modification in the classroom: what works and what doesn't work.
- Special health considerations
- Previously used reinforcement mechanisms: levels of success.

Using this information as a guide, a decision might be made for a colleague to serve as another set of eyes in the classroom to gather more insight into how the student might be helped to develop more positive behaviors. Ultimately, this information forms the basis for a classroom intervention plan.

Working Together with Families

Attention deficit disorder affects children in all life situations. Communication with the child's family is one of the most important components of any school program.

Invite parents to meet with you and help you plan the child's educational program. Be sensitive to the parents' frustration and fears. Reaffirm your commitment to helping the child be a success.

Some parents are excellent candidates for classroom service. In addition to serving as classroom aides, parents can also be enlisted to provide special assistance. For example, teachers in Fort Lauderdale call upon parents to serve as guest lecturers on unit topics such as woodworking, cooking, or chess.

Families Help Shape Behaviors

The success of a classroom behavioral management program can be enhanced by the family.

Educators at Westside Community Schools have developed a classroom-home strategy for involving families in reinforcing targeted positive student behaviors. Students receive points each hour for demonstrating positive classroom survival skills such as completing tasks and assignments, following instructions, and remaining in one's seat. Points are recorded on a form, which is reviewed at home. Families agree to reward or withhold privileges in the home depending on their child's performance. A special procedure allows students to earn back points at home if they have had an unsuccessful day at school.

To enable students to become better organized about their homework assignments, an assignment sheet was developed by a teacher at St. Charles School in Boardman, Ohio. The assignment sheet lists each subject and provides a space where the student indicates whether or not the homework was completed. Throughout the day, the sheets are periodically reviewed to ensure that students are recording assignments. As students demonstrate independence in completing assignments, the number of reviews is decreased. Parents are expected to review and sign off on the sheets. Moreover, parents agree that uncompleted homework will be completed at school, even if it means that they have to furnish transportation home after school hours.

These Students Are Worth the Effort

The bottom line is not to give up on any student. Although students with attention deficit disorder might challenge your patience and cause momentary despair, helping them succeed can be especially rewarding. The modifications, alterations, and accommodations you make today may have a lasting effect on the lives of these students in the future.

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Making It Work in the Classroom

5

Across the country, teachers are helping students with attention deficit disorder succeed in their classrooms. They are helping students organize their work, supporting their attempts at positive classroom behavior, and building relationships with their families.

We'll meet two classroom teachers who are making a difference in the lives of their students. What makes these teachers so outstanding is their commitment to teaching ***all*** children. They acknowledge and respect learning differences and see to it that every child has every opportunity to learn.

Your Notebook Should Look Like This...

Robert King marked his 25th year working with middle-school-aged students in 1993. Over the years, he has come to accept the fact that many students — especially those with attention deficit disorder — will have difficulty keeping assignments organized in his geography and social studies classes. To make sure that all students are successful, he has developed an effective approach to structuring class assignments and work at Drexel Hill Middle School in Pennsylvania.

Acknowledging students' short attention spans, the first thing Mr. King did was reduce his reliance on the textbook, making use of handouts for the majority of assignments instead. While this approach addresses attention span difficulties, it requires that students have the ability to organize and keep track of these handouts. Mr. King's greatest challenge was figuring out how he could assist students with organization while at the same time helping them to become independent. His solution: an organization procedure that is routinized for each unit of study.

Students are expected to keep three-ring note books. At the beginning of each unit, Mr. King has students create a table of contents that will become the first page in their notebook. He prepares a model table of contents with them, eventually displaying his sheet on the bulletin board under the prominent heading, "Your Notebook Should Look Like This...."

As each succeeding assignment is given, Mr. King:

- Writes the assignment on the blackboard.
- Places a copy of the assignment on the bulletin board and numbers it.
- Lists the assignment on the table of contents.
- Instructs students to number their assignment, add it to their table of contents, and add it to their notebooks.

This strategy allows students to ***see*** what the current notebook should look like, and it also helps students who were absent quickly see what they have missed.

At the end of each unit, notebooks are handed in and graded. Mr. King notes in the table of contents next to each item whether or not the work was completed. A copy of the table of contents is then sent home to parents, who must review it and return it with a signature. In advance of a unit, Mr. King makes the table of contents available to parents, who use it at home to help their child complete home-

Try This

Reward students who come prepared for test reviews with tokens that they can cash in for extra points on their exam.

work and stay on top of the work.

Structuring Class Presentations: No Surprises

Students arrive in class with their notebooks. On the blackboard, Mr. King has written their assignment for the day. Class periods are "chunked" or broken down into thirds to accommodate short attention spans.

As a matter of routine, Mr. King begins the first 15-minute segment with current events. Each week, students are expected to bring in a current event and share it with the group. During this sharing, students take notes which they will be allowed to use on their weekly quiz. Some students have found that when they circle important points in their notes, their quiz scores increase.

After 15 minutes of current events, the class shifts to reviewing their work from the previous day. As students retrieve their worksheets from their notebook, Mr. King walks through the aisles and marks their worksheets with a stamp pad. During group review, Mr King draws on a number of instructional techniques that keep students engaged and focused on the important content. He

- Summarizes key words in answers.
- Repeats key concepts.
- Writes key concepts on the board, as well as stating them. When appropriate, he uses maps, globes, or colored drawings to demonstrate concepts.
- Has students as a group recite difficult concepts.
- Directs questions to students who begin to drift off task.
- Moves pace along quickly.

The final 15 minute segment is devoted to student planning. Mr. King repeats the directions, which are also written on the blackboard, and directs the students to the first step in completing the task. From a sheet containing terms and definitions of land formations (e.g., glaciers, ponds, mountains, etc.), students are to choose one that they will research and illustrate. As students read over the sheets and decide, Mr. King walks through the room giving individual students the "go ahead" with their choice.

At the end of the class, Mr. King goes to the bulletin board and reviews what the students' notebooks should look like. He reminds them about their homework, repeating directions several times.

The key to Mr. King's success with this age group is structure — structure that is accompanied with repetition, routine, and organization. Students are constantly reminded of to what is

Try This

Use movies as a reward for classroom achievement. Allow students to earn tickets that they can use to buy popcorn and juice during the movies.

expected of them, and, as Mr. King will tell you, "there are no surprises."

It's OK to Make Mistakes When You're Learning

Walk into Mrs. Mann's second grade classroom in San Diego, California, and you are immediately struck by an atmosphere of caring and learning. At this young age, students are still discovering how to learn, how to participate in class, and how to navigate through the day. It is a particular challenge for students with attention deficit disorder, but Mrs. Mann recognizes their struggle and builds a classroom atmosphere that respects their difficulties in learning and builds on their strengths.

It's time for language arts. Students are on the carpet, clustered around their teacher. A tic-tac-toe game keeps track of students' correct answers — "Ocean has a long or short O?" "Clock has a long or short O?"

A girl with characteristics typical of attention deficit disorder becomes overexcited at the thought of adding an "X" for her team and makes an "O" on the game board instead. As students start to protest, Mrs. Mann asks, "Some of us are still learning how to play the game. How do we teach someone how to play the game?" Hands go up as students proudly tell how they would be a good friend and help their classmate learn. Mrs. Mann continues, "Is it OK to make a mistake?" Students respond in the affirmative. Mrs. Mann continues, "Even teachers make mistakes. Remember yesterday when I..." Before the lesson is over today, Mrs. Mann will actually "make another mistake," during which she will have the students model appropriate supportive behaviors.

Once she has made use of this "teachable moment" to reaffirm class rules and norms, she returns the focus to the game. "How many boys and girls see the possibility for three Xs in a row?" Students excitedly start to talk out and squirm with excitement. "What signal do you make when you're excited?" Thumbs go up as students visibly settle down.

After this large-group orientation, during which time students also practice their seatwork assignment, heterogeneous small groups begin their 30-minute rotations. One group will stay with Mrs. Mann, another group will go outside with the classroom aide, and the third group will go to their seats and complete their assignment with the help of two parent helpers. Every 30 minutes, groups rotate. This schedule allows Mrs. Mann to vary the time frame for students, providing them with a variety of tasks that keep them motivated and interested.

Try This

Give out "Caught Doing Something Good" awards to students who have done something extraordinarily positive.

Making It Work in the Classroom

To make smooth transitions between lessons, Mrs. Mann uses what she calls a "passport to leave" system. Before they can leave, students must give her the correct answer to a question that is directly related to their seatwork assignment. This technique serves a dual purpose in pinpointing individual students who will need a little more assistance at the same time structuring how the students will move to their next learning station.

Success Breeds Success

During lessons, Mrs. Mann pays attention both to ***what*** the students are learning and to ***how*** they are learning. At the beginning of the year, she spends considerable time directly teaching classroom rules and codes of behavior. Among the techniques she uses to support students to behave appropriately are:

- Cueing the children with statements such as "Look at me" and "One, two, three, eyes on me."
- Eliminating materials from the learning environment that are not presently in use. Even during a lesson when materials are used periodically, she will explicitly direct students to put their workbooks behind them when they are discussing an answer or to put pencils down.
- Reminding students to use "inside voices" or "inside walking," which helps them understand that depending on the setting — in this case the classroom rather than the playground — they should behave in different ways.
- Praising students who are demonstrating appropriate behavior.
- Providing seating options for students. They may sit at their desks or in a designated quiet space. Some students choose to sit outdoors to work, where they are free to talk with one another. All students have access to cardboard carrels they can put up at their desk for more privacy.
- Allowing students to wear headphones to cut down on noise distractions.
- Dimming lights to signal an activity change.

These techniques help students with attention deficit disorder participate at high levels of engagement. Potentially problematic behaviors are controlled before they can escalate.

Second Grade Super Citizens

"I like the way students are listening." "I like the way Kevin is raising his hand." "I like the way Ashanti is sitting up straight." Mrs. Mann regularly draws attention to students who are modeling good classroom behavior.

Try This

Enlist the help of another student — or buddy — to accompany the student to different locations.

To support her approach, she has developed a "Super Citizen Award" system. Students who have not deviated from the rules all day are eligible for a special reinforcement. Students can increase their chances for reinforcement by collecting additional Super Citizen cards throughout the day. With this feature, Mrs. Mann randomly selects students at varying intervals who are demonstrating good classroom behavior and gives them a card. Students write their names on the cards and place them in the container — this month, a jack-o-lantern — for a special drawing. At the end of the day, or several days, depending on the particular stage of skill development, Mrs. Mann draws a name or names. These students might receive a special treat or privilege such a having the stuffed panda sit on their desk, extra activity time, or special attention from someone such as the principal.

Underlying this technique is an overall classroom management system. A classroom chart containing a library card pocket for each child hangs in the front of the room. In each pocket are four cards with the following meanings attributed to them:

- Pink: Demonstrating appropriate behavior/following rules.
- Yellow: Behavior requires a warning.
- Red: Behavior requires time in the quiet chair.
- Blue: Behavior requires time away from fun activities (e.g., recess) and/or a telephone call or note to parents.

All students start out "pink" each day. Each morning, Mrs. Mann reviews the rules, paying special attention to those with which students seem to be having difficulty.

Teachers Make a Difference

Both teachers make it a daily practice to find flexible instructional solutions to student learning needs. They communicate openly to students a willingness and commitment to work with them on a personal level to achieve high academic outcomes. Showing concern for the whole child while accommodating special needs goes a long way in helping ***all*** students feel secure in their classes.

Try This

To set a quiet mood, play soft music in the classroom.

Putting These Ideas to Work ⑥

Your professional role extends beyond the classroom. All over the country, teachers are taking a leadership role in advancing their schools' progress in meeting the needs of all students, including those with attention deficit disorder.

As with any change to a system, you will probably find that there are certain obstacles to overcome in fully implementing new ideas. There are multiple approaches to supporting implementation of a strong instructional program for students with attention deficit disorder. Many school districts are finding that at the very least they need to support:

- Professional development.
- Development of collaborative teams.
- Administrative assistance at the building level.

Professional Development Makes a Difference

Everyone has a stake in making sure that students with attention deficit disorder receive the best education possible. Parents, community members, the medical profession, teachers, administrators, and support staff — including bus drivers and lunch monitors — all can benefit from a better understanding of students with attention deficit disorder.

School districts are finding that professional development can have a positive impact on the education of students. Under the staff development umbrella are successful information sharing techniques such as inservice workshops, collaborative meetings among all who come in contact with students with attention deficit disorder, and print materials. As a classroom teacher, you can play an important role in shaping workshop agendas, serving on collaborative teams, and making recommendations for print materials.

Teachers Can Help Shape Workshop Agendas

The first task focuses on topic selection. School districts, such as Colorado Springs, Colorado, Reno, Nevada, and Raleigh, North Carolina, each of which has a track record in designing inservice presentations, suggest getting started with the following topics:

- Overview and characteristics of attention deficit disorder.
- Medical interventions.
- Identification and screening procedures.
- Classroom interventions.
- Parent and family involvement.
- Community resources.
- Legal issues.

Parent workshops, which may or may not be combined with those of school district staff, often include a session on working with the child in the home. Engage parents in helping you plan and run such workshops.

The next question usually addresses who should deliver the inservice training. You can take an active role by suggesting speakers. ***Where Do I Turn? A Resource Directory of Materials About Attention Deficit Disorder*** (see "Other Useful Resources" at the end of this booklet) provides you with an excellent beginning road map of where to turn for ideas and assistance.

At a basic level, it is critical that the workshop leader have training directly related to students with attention deficit disorder, as well as direct experience that is relevant to the participants. Because attention deficit disorder is a relatively new area, there may not be an abundance of qualified trainers. If this is the case, suggest to your district that they consider, as was done in Billings, Montana, identifying someone in the district who is willing to become trained in return for delivering district-wide sessions.

In the spirit of collaboration, which is at the core of so many successful programs for students with attention deficit disorder, team-led workshops are growing in popularity. Here are some starting points suggested by other districts:

- In Colorado Springs, the social worker and school psychologist co-lead training sessions in which they invite guest speakers from the community to comment on topics such as legal and medical issues.
- Panel discussions are a good way to bring together diverse views on the topic, while at the same time acknowledging the contributions that different professionals make. In Jacksonville, Florida, educators model the team approach on their panels by including the school psychologist, medical doctor, special and general education teachers, a parent, and a student.
- In Ohio, a parent group makes videotapes that can be used in subsequent years for training.

Through Collaboration, New Ideas Are Realized

Learning from colleagues and other knowledgeable people is one of the best ways to discover new ideas and approaches. Strategies for addressing the needs and strengths of students with attention deficit disorder can be identified through school-based assistance teams, special-general education teacher partnerships, and community action committees.

Teachers often report satisfaction with collaborative models, primarily citing the opportunity they provide to share knowledge, expand skills, and develop creative solutions to problems.

- The Student Services Division in San Diego, California, put together a core team of consultants from nursing, psychology, and counseling whose role it was to increase the knowledge and skills of school personnel while at the same time coordinating services. Mentor teachers in the district also took on a leadership role in assisting classroom teachers to meet special challenges in their

Try This

Busy schedules and lack of transportation can limit workshop attendance. Ask your local cable network to broadcast sessions.

Sturgeon Bay, Wisconsin

schools.

- The Orange County Public Schools supports general education classroom teachers with a cooperative consultation model that teams them with special educators and other school support personnel. The six-step process works this way:

  Step 1. Student needs are identified.

  Step 2. Classroom expectations are described.

  Step 3. A comparison is made between the student's skills and course expectations. Special attention is given to other students in the classroom who have similar needs.

  Step 4. Instructional strategies are suggested and a plan made for implementing them in the classroom.

  Step 5. The plan is implemented, with support from the collaborators.

  Step 6. Implementation is monitored. When necessary, the plan is modified.

- Parents, educators, and community leaders in North Canton, Ohio, formed the ***ADD Partnership***, a parent-directed organization, to increase awareness and foster information exchange about attention deficit disorder. The ADD Partnership offers training and materials to parents and educators.

Other Ideas That Get the Message Out

In addition to training events and collaborative teams, school districts are finding other innovative techniques that help them communicate with the community and district staff about attention deficit disorder.

In some cases, districts have formed working groups charged with identifying and communicating information about attention deficit disorder. A Task Force on Attention Deficit Disorder was established in Baltimore, Maryland, to spearhead information dissemination. Comprised of parents, educators, and community members, the task force developed brochures describing characteristics and instructional tips that were sent to all district teachers and parents. This task force also assisted in conducting inservice workshops.

Brochures can be particularly useful in helping individuals understand attention deficit disorder. Try and target these brochures and flyers to the interests and awareness needs of specific groups.

Manuals that document district procedures, especially as they relate to screening, add an element of consistency and comfort. If your district does not already have a procedures handbook on identifying, screening and working with students with attention deficit disorder, encourage it to do so. District educators in Raleigh, North Carolina, found that their screening manual facilitated more consistent and systematic practices. The manual included a recommended screening procedure, general information on attention deficit disorder, suggested classroom interventions, and recommended home and school behavior rating scales.

Finally, it is important to link up with other community-based organizations that are providing services related to attention deficit disorder. In some states, local support groups and organizations for parents have been identified.

Encourage Administrator Support

Whenever new innovations and approaches are introduced in schools, administrators are usually called upon to facilitate smooth and effective implementation. It is important to work with your building principal when planning instructional supports for students with attention deficit disorder.

Help your administrator determine what will best support you and your colleagues. Administrators need to know from you what they can do to support better outcomes for your students. Often, you are in the best position to identify specific barriers to success and solutions for overcoming them. Administrators can be supportive of the process by providing teachers with time to meet and plan, establishing opportunities for them to form partnerships with other professionals and parents, and identifying resources. Share with your administrator ideas from other districts that have helped their staffs move forward. For example:

- Many social skills approaches that shape new behaviors require giving frequent positive feedback to the student during the initial training phase. To assist classroom teachers, educators in the Irvine Unified School District, in California, entered into a partnership with the local university. Behavioral specialists from the university complete their practicum requirement in the schools where they provide social skills training to identified students.
- Scheduling a workshop for a diverse group of professionals and community members can be challenging. Meetings might be held over lunch or on Saturdays — whenever all participants are free. Besides taking up well-deserved leisure time, often these atypical times require financial

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outputs, such as fees for baby sitters. You might follow the lead of a Kentucky district and encourage your own district to provide child care during these times. Or consider, as Billings, Montana, did, rewarding the extra efforts of those who attend workshops by awarding graduate credit hours.

- Assign a professional staff position responsible for coordinating efforts on behalf of students with attention deficit disorder to help get programs in place and off to a good start. The school board of Broward County, Florida, found that having a designated person design guidelines for serving students with attention deficit disorder was a key to the success of its program. Both the Rowen-Salisbury, North Carolina, and the Kenosha, Wisconsin, school districts employ a full-time support teacher, who is charged with creating procedures, assisting schools in implementing them, and acting as a liaison to the medical community.
- Establish a building contact person for referrals and questions. In Louisville, Kentucky, and Salisbury, North Carolina, the school counselor serves this role.

Making It Work

There are rarely any easy answers when first putting a program into place. As with any new approach, the extended efforts that you expend in laying the foundation will serve you well in the long term. While we can all envision major changes that would facilitate this undertaking, as you might have noticed in the examples, it is often the ***little*** things that move your work forward on a daily basis.

Our children and youth are our greatest resource for the future. We cannot afford to waste one life. The more we can do today to help ***all*** students succeed, the closer we will be to reaching our goal of educating citizens to their highest potential.

Try This

Ask your librarian to add resources on attention deficit disorder to the school's professional collection. Encourage community groups to raise money for these purchases.

Washoe County
School District,
Reno, Nevada

Locating Additional Resources

7

What can we learn from nationally funded centers? As was stated in the introduction, the information in this booklet was drawn in part from the work completed at the five OSEP-funded centers on attention deficit disorder. A special issue of ***Exceptional Children*** (Volume 60, Number 2) focused on the work of these centers and is highly recommended for those readers who want a more research-oriented discussion of the issues.

Full-length syntheses and executive summaries of the centers' work are available through the ERIC Document Reproduction Service

(1-800-443-ERIC). If you have a computer and modem, you can also access the documents through two national on-line information services.

- ***SpecialNet*** (1-800-927-3000), available on the PROGRAM.EVAL bulletin board.
- ***CompuServe*** (1-800-524-3388), available by asking Representative #464 about the "A.D.D. Forum."

Assessment and Characteristics of Children with Attention Deficit Disorder. R. A. Dykman, P. T. Ackerman, & T. J. Raney, Department of Pediatrics, Arkansas Children's Hospital, Little Rock, Arkansas.

The synthesis provides an overview of the knowledge base to date along with a history of the field, definitions, epidemiology, etiology, biological theories, experimental approaches, and information about assessment. The work contains a review of the assessment instruments used to assess attention deficit disorder.

The Effects of Stimulant Medication on Children with Attention Deficit Disorder: A Review of Reviews. J. M. Swanson, University of California-Irvine ADD Center, Irvine, California.

The report represents a review and synthesis of the literature addressing the use of stimulant medication to treat children with attention deficit disorder.

Promising Practices in Identifying and Educating Children with Attention Deficit Disorder. B. Burcham & L. Carlson, Federal Resource Center, University of Kentucky, Lexington, Kentucky.

The report describes 28 practices for identifying and instructing students with attention deficit disorder. The descriptions are based on field observations, interviews, and written documentation.

Research Synthesis on Education Interventions for Students with Attention Deficit Disorders. (March 1993). T. A. Fiore, E. A. Becker, & R. C. Nero, ADD Intervention Center, Center for Research in Education, Research Triangle Park, North Carolina.

The synthesis discusses research conducted in the following areas: positive reinforcement of token reinforcement, behavior reduction, response cost, self-instruction or cognitive-behavioral training, parent or family training, task or environmental stimulation, and biofeedback.

A Synthesis of Research Literature on the Assessment and Identification of Attention Deficit Disorder. J. D. McKinney, M. Montague, & A. M. Hocutt, Miami Center for Synthesis of Research on Attention Deficit Disorder, University of Miami, Coral Gables, Florida.

The synthesis is organized around the following topics: review of instruments for assessing attention deficit disorder, educational characteristics and coexisting disorders, assessment and identification in preschool, family characteristics, ethnicity, and socioeconomic status related to assessment and identification.

Other Useful Resources

There are a number of books, pamphlets, and manuals available that take a practical look at educating students with attention deficit disorder. Probably one of the best resources to get you started is ***Where Do I Turn? A Resource Directory of Materials About Attention Deficit Disorder***, which is available from the following groups:

- American Federation of Teachers (AFT)
- Association for Supervision and Curriculum Development (ASCD)
- Attention Deficit Disorder Association (ADDA)
- Children and Adults with Attention Deficit Disorder (CHADD)
- Council for Exceptional Children (CEC)
- Learning Disabilities Association (LDA)
- National Association of Elementary School Principals (NAESP)
- National Association of School Psychologists (NASP)
- National Association of State Boards of Education (NASBE)
- National Education Association (NEA)
- National Information Center for Children and Youth with Disabilities (NICHY)
- National Parent Teacher Association (NPTA)

Among its many sections, the directory lists the following:

- National Organizations
- State Resources
- General Sources of Information
- Resources for Parents
- Resources for Children with Attention Deficit Disorder
- Resources for Adults with Attention Deficit Disorder
- Resources for Educators

Media products, publishers, and other publications such as newsletters are also included.

APPENDIX E

Assessment
Medical Diagnosis vs. Educational Identification

COMPREHENSIVE ASSESSMENT OF CHILDREN AND YOUTH WITH ATTENTION DEFICIT HYPERACTIVITY DISORDER

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INTRODUCTION

Attention deficit hyperactivity disorder (ADHD) is an invisible disability with no clear physical markers to indicate its presence. The primary characteristics of the disability, including inattention, impulsivity and overactivity, while easily observed, are exhibited by most children to some degree and under some circumstances. Children have difficulty paying attention to their school work, do not like to wait in line and are endless bundles of energy. However, only when these typical behaviors are exhibited in a devlopmentally inappropriate manner or to an excessive degree should one consider a diagnosis of ADHD. Further complicating the accurate assessment of ADHD is the fact that the primary characteristics of ADHD are associated with a number of other conditions such as frustration with school work or preoccupation by home problems. For example, when a student is asked to complete academic tasks that he or she is not equipped to perform, the resulting behavior may mimic the characteristics of ADHD. Moreover, children with ADHD may also exhibit other disorders such as conduct disorders, learning disabilities, anxiety, etc., or children may have these corollary conditions alone and yet appear to be displaying ADHD symptoms. The assessment challenge revolves around determining to what extent the characteristics of ADHD are sufficiently present to warrant a diagnosis, if these characteristics can be accounted for by other factors.

and to what extent the features of the disorder are interfering with the child's life functioning, including education.

Diagnosticians should be thoroughly familiar with the characteristics of ADHD and associated problems prior to entering into an evaluation with these children and their families. Barkley (1990) offers a definition of ADHD that provides a framework for understanding the child and family who may be significantly impacted by coping with the stress that ADHD brings:

> Attention-deficit Hyperactivity Disorder is a developmental disorder characterized by developmentally inappropriate degrees of inattention, overactivity, and impulsivity. These often arise in early childhood; are relatively chronic in nature; and are not readily accounted for on the basis of gross neurological, sensory, language, or motor impairment, mental retardation, or severe emotional disturbance. These difficulties are typically associated with deficits in rule-governed behavior and in maintaining a consistent pattern of work performance over time. (p. 87)

ADHD is viewed as being on a continuum much like intelligence. There are degrees of being smart as there are degrees of ADHD. Recently, there have been a host of heated debates regarding how severe the disability must be before one can be eligible to access services. Eligibility criteria may indeed vary based on the diagnostic system being applied. Perhaps it would be more appropriate to move way from the concept of sorting and labeling children to defining and evaluating needs which support the family and improve the child's education.

This paper outlines relevant issues in both the medical and educational/psychological assessment of children with ADHD. We begin with a brief overview of the legal context for assessment of ADHD in schools, some consideration of issues related to cultural diversity that complicate accurate assessment of ADHD and a comparison of the medical and educational approaches to assessment and diagnosis. Next we summarize a problem-based assessment model that offers a direct link to successful interventions as part of its process. The following section reviews the purpose, strengths and limitations of the most commonly cited aspects of a comprehensive assessment of ADHD. We conclude with brief descriptions of model assessment programs currently operating in both a large urban school system and a medical center which offer many features of the problem-based assessment model.

ADHD AND THE LAW

The legal requirements for assessing students with ADHD are similar to those associated with assessing any child suspected of having a disability, particularly with regard to determining eligibility for services in the school setting. Before a child may be evaluated in a public school setting to determine if he or she has an attentional deficit of a disabling nature, the school must obtain the parent's informed consent, the child must be assessed in each area of suspected disability, the evaluation team must consist of at least one member who is knowledgeable about the suspected disability, etc.

Children with ADHD who have no other known disabilities may be eligible for services in special education in the category of Other Health Impaired under the Individuals with Disabilities Education Act (IDEA). The category of Other Health Impaired is a long-standing category in special education that has largely been overlooked as a method of serving students with ADHD (Latham & Latham, 1992). Students with ADHD who meet the eligibility requirements for other disabling conditions (most commonly either learning disabilities or severe emotional disturbance) certainly may access special education services through these categories of disability as well.

Section 504 of the Rehabilitation Act of 1973 provides an alternative mechanism for serving students with ADHD. The goal of Section 504 is to end discrimination against individuals with disabilities. Until recently the Rehabilitation Act of 1973 was seen as largely irrelevant to educational settings because of the passage of federal special education legislation in 1975. However, parents and other child advocates have successfully argued that the more liberal definition of disability in the Rehabilitation Act opened a legal avenue for parents to obtain services for students who could not meet the eligibility criteria of IDEA or possessed a disability not recognized by IDEA. Under Section 504 of the Rehabilitation Act, a student may qualify for appropriate remedial accommodations if it is determined that a disabling condition is interfering with a major life function, including educational achievement.

Thus students with ADHD may be eligible for services under the IDEA or Section 504 of the Rehabilitation Act. Schools may use the same process and safeguards for qualifying students under the IDEA and Section 504 or they may adopt separate procedures, for example, more streamlined assessment given the latitude allowed under Section 504. It must be recognized that school districts risk the loss of all federal funding if they fail to meet the requirements of either the IDEA or Section 504 of the Rehabilitation Act. Under both federal laws, if a child's attentional difficulties are interfering significantly with his or her ability to learn in school, the child must be appropriately evaluated and accommodated. Readers interested in a more complete review of the legal requirements that guide the assessment of students suspected of having ADHD should consult Aronofsky (1992) and Latham and Latham (1992).

SPECIAL CONSIDERATIONS FOR CULTURAL DIVERSITY

When designing an assessment protocol for children with ADHD, sensitivity to issues related to cultural diversity is imperative. There is no evidence that ADHD appears more frequently in any particular ethnic, racial or cultural group. Yet, because of differing cultural values and expectations, and also stereotypes associated with specific subgroups of the population, the potential for over- or under-representation of various racial/ethnic groups is considerable, especially given the lack of clear empirical determinants of ADHD. In addition to the potential for misdiagnosis. Barkley (1990) suggests that social and cultural factors can influence the adjustment of children or youth with ADHD as well as the likelihood that the family will access available sources of help. For example, cultural attitudes about competition, aggression, delaying gratification, and discipline may either mask or exacerbate a child's attentional difficulties as well as influence a family's adjustment to the challenges children with ADHD present.

Pearson and DeMers (1990) contend that much of the bias against children from culturally diverse backgrounds, including the overrepresentation of some racial minorities in special education, can be linked to measurement issues. They argue that the traditional heavy reliance on standardized tests (such as intelligence tests) to identify deficits in children disproportionately penalizes children from culturally diverse and minority backgrounds since these groups are often inadequately represented or even absent from the test's normative sample. In addition, environmental and examiner variables may act to impact test results negatively for children from culturally diverse backgrounds. For example, children being evaluated may feel less comfortable and perform less optimally if their racial or ethnic background differs markedly from the examiner.

To address these issues of cultural diversity and reduce the likelihood of misidentification of disabilities in culturally diverse children, the Federal Resource Center (1993) suggested the following assessment strategies: use assessment instruments normed on a population representative of the person being assessed, use alternative assessment techniques such as performance based assessment which emphasize attainment of educational objectives rather than comparison of individuals with a normative group and use an assessment model that identifies student strengths as well as deficits.

Members of assessment teams should remain alert and sensitive to cultural variations in children's attitudes, behavior and values, become knowledgeable about such cultural variations in the population of students being served and insist on fair assessment practices that are linked to successful interventions, not just labels.

MEDICAL DIAGNOSIS VS EDUCATIONAL IDENTIFICATION

Diagnosis is a medical term and is used by family physicians, pediatricians, psychiatrists, psychologists, clinical social workers and others who work in health care settings. These health care practitioners evaluate mental health disorders using the taxonomy and classification system found in the Diagnostic and Statistical Manual of Mental Disorders, currently in its fourth edition (DSM-IV), published by the American Psychiatric Association (1994). Hyperactivity and attentional problems in children and youth have long been recognized as diagnostic categories in previous editions of the DSM. Health professionals assess individuals with ADHD to determine if they meet the diagnostic criteria as outlined in the DSM-IV. Although there as been considerable debate about the characteristics and subcategories of ADHD (e.g. whether overactivity is a subtype of ADHD or a separate disorder), the diagnostic criteria and subtype categories of ADHD as delineated by the DSM-IV are widely accepted .

The DSM-IV describes ADHD in three categories: ADHD predominantly inattentive type, ADHD predominantly hyperactive-impulsive type, and ADHD combined type. Specific criteria are described in the DSM-IV to assess whether a person receives a diagnosis of ADHD and which type. A DSM-IV diagnosis of ADHD is based on the accumulation of a number of symptoms which are developmentally inappropriate, appear across a number of settings, and cause significant impairment in social, academic or occupational functioning (American Psychiatric Association, 1994).

The school-based identification of children with ADHD often has little to do with diagnostic criteria as outlined by the DSM-IV. The objective for school personnel is to determine the extent to which the symptoms associated with ADHD are interfering with the student's ability to profit from school academically, socially, or behaviorally so that appropriate plans can be developed to enhance the child's school experience. School districts must determine if the child is educationally disabled and in need of modifications and adaptations in regular education, or special education and related services.

However, if a school district is considering the possibility of serving a child who may have ADHD under the IDEA category of Other Health Impaired , a medical diagnosis stating the nature of the health impairment (e.g., ADHD) is typically required. In some states, the diagnosis must be made by a physician while in other states, persons competent to use the DSM-IV may make a diagnosis of ADHD under Other Health Impaired. If a committee at the local district deems it necessary to have a medical evaluation to determine eligibility and appropriate services for a child suspected of having ADHD, then the local district is responsible for assuring that the medical evaluation is a part of the assessment at no cost to the parents. Thus, one can see how medical diagnosis and school-based identification of ADHD may overlap and create issues that should be collaboratively resolved by local school districts and the medical community seeking to serve these children.

Thus, at school, a medical diagnosis of ADHD does not drive service delivery. It is a matter of assessing the symptoms characteristic of the disorder and associated problems and then developing a plan of action to serve the student in the school environment. In clinical settings, use of the DSM-IV is often more crucial to the evaluation process and treatment plans are established around the diagnosis.

A PROBLEM-SOLVING ASSESSMENT MODEL OF ADHD IDENTIFICATION

As clinicians in health settings or practitioners in school settings, extending assessment beyond the boundaries of a DSM-IV diagnosis acts to serve students and families more effectively. Assessment should not be restricted to answering the question of whether or not the student has ADHD. Assessment should be linked to on-going evaluation of the student's instructional needs, developing appropriate interventions and measuring the success of those interventions. Bergan and Kratochwill's (1990) problem-solving paradigm for delivering teacher consultation services in schools offers such an intervention-linked approach to assessment. Landau and Burcham (in press) have translated this problem-solving approach to assessment into a flexible and dynamic strategy for assessing children and youth with ADHD that may be employed in either medical or school settings.

This problem-solving approach to assessment allows evaluation teams or diagnosticians to form collaborative relationships with educators, parents, physicians, and mental health professionals to evaluate and intervene regarding the authentic challenges of students with ADHD. It involves identifying and analyzing problems as well as implementing and evaluating intervention plans. Landau and Burcham (in press) view assessment as a dynamic problem-solving process rather than a mechanism to sort and label children.

During the problem identification stage, the role of the diagnostician or team is to clearly delineate the challenges and strengths of the child. Determining exactly which behaviors create concern for the referring source as well as others who are directly involved with the child is important at this stage. Areas of academic and social strength are identified along with any deficits to aid in the process of building on areas of competence. Assessment strategies used during this phase often include interviews with adults directly involved with the child, rating scales, and observations of the child in natural settings. It is important to collect specific behavioral data on target behaviors, not just global impressions of the child's difficulties. Data collection continues during this initial phase of assessment until all areas of concern are clearly articulated and measured.

During the problem analysis stage, there are essentially two goals of assessment. The first goal of assessment is a complete evaluation of the child's academic and behavioral strengths and weaknesses. This may include administration of standardized norm-referenced tests as well as non-traditional data collection procedures such as performance-based or curriculum-based assessment. Secondly, variables external to the child should be evaluated. For example, there often are environmental/social conditions that act to maintain problematic behavior such as peer influences, poor behavior management strategies used at home or school, etc. Indepth consultation and interviewing with both teachers and parents as well as observation of the child in a variety of settings may be appropriate at this stage to determine controlling variables. After the child and the environment have been assessed, interventions should be designed, plans for implementation outlined and monitoring strategies formulated (Bergan & Kratochwill, 1990).

During the plan implementation stage, the purpose of assessment is to monitor treatment integrity. If the plan is not carried out as described during the analysis stage, then it can not be determined if intervention objectives are met. Some troubleshooting may be necessary at this stage to deal with unforeseen problems. For example, if the treatment requires the child take home a daily report to his or her parents and the report never reaches home, then another method of home-school communication will need to be arranged.

During the problem evaluation stage, the purpose of assessment is to determine the extent to which objectives have been accomplished. Performance of the child during the problem identification stage should be compared to the child's current performance. Again, specific strategies such as frequency counts to collect data on target behaviors can be very useful in determining if progress is being achieved toward stated goals. Other techniques such as interviews and rating scales may also prove beneficial. If the data collected at this point reveal that progress is not being made, it is recommended that a return to problem analysis and further assessments be undertaken.

As discussed by Landau & Burcham (in press), thorough assessment of children and youth with ADHD must reflect a protocol using multiple methods of assessment with multiple informants in multiple settings. First, there is no single assessment strategy or instrument that can stand alone at any stage of the evaluation process. Results from standardized and non-traditional testing, interviews, observations, rating scales, and medical evaluations each provide only a portion of the total picture of the child and the family. The information must be integrated by a knowledgeable diagnostician to formulate hypotheses as well as develop and evaluate treatment plans.

Secondly, accurate assessment of children and youth with ADHD depends on the involvement of multiple informants. Parents, educators, community professionals, and peers can contribute information about their perspective of a child's problems as well as strengths. Any particular child may act differently in the presence of certain people compared to others and an astute diagnostician will be curious regarding the details of these situations. Different people vary in the expectations and demands they place upon the child which may be important in unraveling the problems. Information should be gathered from multiple informants in each setting (e.g., former as well as current teachers and classmates).

Lastly, children with ADHD do not present the same problems in every environment, so it is important to assess the child in multiple settings. For example, a child's behavior in an individualized session with a school psychologist or a physician may be dramatically different than it is in the classroom or on the playground. Landau & Burcham (in press) suggest that specific setting differences should be well integrated in the details of problem identification, problem analysis, plan implementation and evaluation.

STRENGTHS AND LIMITATIONS OF SPECIFIC ASSESSMENT STRATEGIES

In order to conduct effective assessment procedures, diagnosticians must be knowledgeable about normal child development, as well as the characteristics of ADHD (inattention, impulsivity and hyperactivity) and other problems often associated with ADHD including conduct disorders, academic difficulties, disturbed peer relationships, and the internalizing disorders of low self esteem, anxiety and depression. Approaching assessment from a developmental perspective assists in determining if the child is behaving in an age-appropriate fashion and helps set realistic age-appropriate intervention objectives.

However, diagnosticians also must be knowledgeable about the strengths and weaknesses of various commonly employed assessment techniques and skilled in their administration and interpretation. The commonly employed assessment strategies in ADHD diagnosis include rating scales, intelligence and achievement tests, interview procedures, direct observations, computer-driven laboratory tests, and medication monitoring techniques. The purpose, strengths and limitations of each strategy are outlined briefly below.

Rating scales

Behavior rating scales have a long and important tradition in the assessment of students with ADHD. Barkley (1990) summarizes many of the advantages of using rating scales but also outlines the cautions that must be known when using this technique. He suggests that rating scales allow individuals on the diagnostic team to have information regarding the extent to which a child exhibits certain characteristics relative to children the same age and gender. In addition, rating scales are a cost-effective method of collapsing information across situations and time in a way that capitalizes on the insight of individuals who are directly involved with the child. This method can tap behaviors that occur infrequently that may well be missed by direct observation techniques. The problems with rating scales include that they simply represent the opinions of others and these opinions may be impacted by the intellectual, social, emotional, or educational characteristics of the rater. In addition, the rater may have distortions of memory, may misunderstand items on the scale, or may be biased in his or her reporting. Certainly, rating scales do not capture the uniqueness of the child. Rating scales provide considerable information, but essentially that information is the rater's impressions of the child relative to some predetermined dimensions captured by the scale, not necessarily a complete or accurate picture of the child's actual behavior.

Dykman, Ackerman & Raney (1993) identified 42 rating scales used to identify children with ADHD through a grant award from the United States Department of Education. The document describing this work as well as a synthesis of research literature on the assessment and identification of attention deficit disorder (McKinney, Montague & Hocutt, 1993) are available through the ERIC Document Reproduction Service at 1-800-443-ERIC. Many of the rating scales described in the aforementioned documents were developed to assess the primary symptoms associated with ADHD, but several were designed to evaluate associated conditions as well as adjustment factors within families.

Due to the ever-increasing array of available rating scales, the selection of appropriate rating scales can be a laborious and confusing task. First, the diagnostician must always evaluate the psychometric properties of the rating scale under consideration. One must insist upon an age-appropriate adequately normed instrument. Secondly, the purpose for using the scale must be considered. For example, if one is in the problem identification stage of assessment, a comprehensive scale such as the Child Behavior Checklist (Achenbach, 1991) may be appropriate. However, if one is monitoring the effect of stimulant medication on a child's behavior as part of the problem evaluation stage, one may select an instrument more sensitive to medication effects such as the Conners Teacher Rating Scale (1969). It is imperative that the question to be addressed drive the instrument selection, not routine, habit or diagnostician preference for a particular instrument.

During the first stage of assessment, the diagnostic team should collect rating scale information from multiple sources. Edelbrock (1983) suggests that teachers should have students at least six weeks before they are asked to provide this type of data. Rating scales will assist the team in understanding how a variety of people view the child and how these views vary as a function of setting.

During the problem analysis stage, a careful review of data collected from rating scales will be essential in developing intervention plans. Data may reveal patterns as problems related to specific individuals and to specific settings. For example, a child is reported to be very hyperactive by all his middle school teachers who have him after lunch and none of the teachers who have him prior to lunch; or an elementary child may have problems following directions with the regular teacher but not with activity teachers such as physical education, art and music. This difference in symptom severity as a function of time and setting should impact intervention development.

During the problem evaluation stage, rating scales may be used as one method of objectively assessing the child's response to the intervention plan. If a child was pre-tested with a specific rating scale, and an intervention implemented that targets behaviors on that scale, and the child is then post-tested with the same scale, the diagnostician has specific data to evaluate the effectiveness of the treatment. Certainly, there are other methods to assess the child's response to treatment, but rating scales offer a valuable tool in assessing the efficacy of interventions.

Intelligence and achievement tests

There are many standardized tests of intelligence and achievement on the market.

Perhaps the most commonly used intelligence test for school-aged children is the Wechsler Intelligence Test for Children-Third Edition (WISC-III). Standardized IQ and achievement tests are typically required to be administered to children to determine eligibility for services in special education for learning disability or behaviorally disordered programs. This may be useful in assessing children who are suspected of having ADHD as many of these children have co-existing learning and behavior difficulties. It should be noted that IQ and achievement tests can not reliably identify children as ADHD. The need for this type of testing should be determined by the team in the problem identification stage. If, for example, the child has no academic deficits then it may not be necessary to conduct standardized, individualized intellectual and achievement testing. If the child does indeed display a pattern of significant academic problems, formal cognitive and academic testing may need to be completed in the problem analysis stage of assessment.

In addition to standardized tests of intelligence and achievement, performance and curriculum based assessment shows much promise in assessing students academic challenges and strengths (Shinn, 1989). This method is typically used in the problem analysis stage of assessment as well as problem evaluation as these techniques are very sensitive to academic growth. A variety of non-traditional strategies to assess achievement may be useful in assessing children with ADHD. For example, using the teacher's record of grades or maintaining an academic portfolio will reflect changes in the student's performance over time. This can be useful data in monitoring a child's progress and evaluating the impact of a specific intervention strategy.

Interview procedures

Interview procedures are critical in the assessment protocol of children who may have ADHD. There are several things to be accomplished by the interview process. First, interviewing allows rapport to be built with teachers, parents, the child and others directly involved in the life of the child. Interviewing allows target areas of concern to be expressed and clarified during the problem identification stage of assessment. In addition, interviewing allows the diagnostician to elicit information regarding the child's competencies which may be useful during plan implementation. This process may reveal information regarding what is reinforcing to the child and the resources available to support an intervention. Greene (in press) suggests that interviews provide a mechanism to explore information beyond what the child's response to a particular teacher and intervention might be, but also what the teacher's or therapist's response to the child and intervention is as well. Lastly, interviews also allow specifics of controlling variables to be expressed by those referring the child. Information may be obtained regarding the setting(s) and situation(s) where the problems occur.

Clearly parents are the single best source of information regarding the child's developmental and medical history, which is an essential component of the assessment protocol. The parent interview is useful in establishing if there are behavior problems in the home that may be associated with ADHD characteristics and assessing the extent to which these problems interfere with the parent-child relationship, siblings or the martail relationship. The parent interview will provide the diagnostician with information regarding the family's perception of how the child's challenges impact school work, as well as home and community living. In addition information may be gained regarding specifically where problems occur, under what circumstances, and which problems are most troubling to the family as well as information on how the family typically deals with the challenges. Barkley (1990) describes a detailed protocol for developing a parent interview.

The diagnostician completing the ADHD assessment will find it essential to interview school personnel working with the child. Typically, the child's teacher can provide a wealth of information regarding the child's strengths and weaknesses at school compared to same age peers. School records provide a great source of information regarding a child's school history that can prove to be diagnostically valuable. The teacher should be asked about the child's behavior in structured and unstructured settings, the child's ability to handle transitions, work habits, and perceived academic ability as well as actual performance. Information should also be pursued regarding following directions, organizational skills, and handwriting. The School Situations Questionnaire (Barkley, 1990) provides a guideline for the focus of the teacher interview.

In addition to targeting problems, it is important that the teacher interview consist of defining what interventions have been tried and to what extent they were successful. If interventions failed, the teacher interview can provide information on why they were unsuccessful which is important in the problem analysis stage of assessment. Welsh, Burcham, DeMoss, Martin and Milich (1992) indicate there are at least ten reasons why interventions fail. These include: target behavior ill-defined; consequences not consistent; goals set too high; inappropriate reinforcers; child not motivated; reinforcer not salient or immediate; other consequences maintaining the behavior; intervention not a good teacher-student "fit"; parents not supportive; and peers reinforcing the inappropriate behavior. These issues, and other relevant concerns, should be unraveled at the teacher interview session(s). It can not be overemphasized that the teacher is a key player in the assessment of children who may have ADHD. Many teachers do not have a strong knowledge base regarding this disorder, but through a collaborative interview process, teachers can be invaluable in assessing the extent to which the characteristics of ADHD are interfering with the child's education as well as designing and implementing effective intervention strategies.

Another step in the interviewing process is an actual interview with the child. As suggested by Welsh, et. al. (1992) the child interview should focus on the child's perception of the problem, the child's feelings about himself, his or her family, and peers, and the child's attitude toward school. Children with ADHD are acutely aware that they are made fun of, criticized, and disciplined more than other children. Interviewing the child communicates to that child that he or she has to say is important. It may provide an excellent tool for rapport building, identifying exactly how the child perceives the problems, and identifying strengths that may be useful in intervention design and implementation. A note of caution must be made here in that children's self-reports are notoriously less reliable than reports from other informants. Landau, Milich, & Widiger (1990) indicate that children with ADHD deny about 50 percent of the problems their mothers report.

Direct observation

As information emerges from the problem identification and problem analysis stages of assessment, the diagnostician should plan to systematically observe the child who may have ADHD. Observations are frequently conducted at school as this setting provides valuable data regarding on-task behavior during structured activities such as reading group or independent seat work, peer relationships as observed during free time or recess, performance in following directions during a variety of structured tasks, and so on. For example, a teacher suggests that a seven year old, African American boy in her class is never on task and never gets any work done. During the problem identification stage of assessment, the diagnostician should systematically observe the child's on-task behavior and contrast it with the average on-task behavior of other males, including African American males if possible, in the class. It is important to limit the comparison to the same gender, as boys and girls differ in their rates of on-task behavior. Including a culturally similar comparison child adds an element of culture fairness to the assessment. Having this peer comparison contrast data establishes not only if a problem does exist, but to what extent and in what circumstances it does exist. Additionally, it assists the diagnostic team in establishing intervention performance objectives during problem analysis.

Direct observations can also be useful in providing information regarding treatment integrity. For example, it is determined that a teacher will provide feedback to the student every 15 minutes regarding four specific target behaviors. The diagnostician may determine via observation that this is not happening which provides an opportunity for further problem solving (e.g. fifteen minute intervals may not be realistic for student feedback). Thus, instead of noting the intervention failed, the problem is re-analyzed and a more realistic time interval is established by the diagnostic team.

Data collected during direct observation of children is also useful in documenting the efficacy of an intervention. For example, if initial data suggests the child is off-task 80% of the time, and intervention is implemented and follow-up data suggests the child is off-task 40% of the time, the direct observation data has been useful in evaluating a particular strategy.

There is no single observation system that can be recommended as appropriate for all children being referred for an ADHD assessment. The selection of the strategy should depend on the identified problem and the potential of the strategy to capture relevant information (Landau & Burcham, in press). It is extremely important that the child be observed in multiple settings. For example, a child who is said never to be on-task should be observed in small and large group activities, teacher-directed and independent task settings, and structured and unstructured activities. Data resulting from observations should be interpreted in the context of the setting. The inservice training program Attention-deficit hyperactivity disorder: Diagnosis and management - A training program for teachers (Welsh et.al., 1992) provides details of several commonly used direct observation systems. (This program is available through the Kentucky State Department of Education, Division of Special Learning Needs, 500 Mero Street, Frankfort, KY 40601, Attn.: Nancy LaCount.)

Direct observation systems require some training in order to implement; however, they provide sound data to document problems as well as helpful information in the design and evaluation of interventions, all of which is essential in the assessment of children with ADHD.

Computer-driven laboratory tests

Computer-driven laboratory tests have great heuristic appeal and as such have received much attention in the assessment of impulsivity and inattention during the past 20 years. These computer-driven continuous performance tasks attempt to quantify impulsivity and inattention in a laboratory setting. First, it is essential to evaluate the psychometric properties of these procedures prior to investing in them. Secondly, it should also be noted that even under circumstances when adequate normative data, reliability and validity have been established, the data obtained from this technique may not prove useful in assessing the child. If the child does poorly on a continuous performance task, that may contribute to the diagnostician's confidence that the child does indeed have ADHD; however if the child does well on a continuous performance task, one can not use that data to disconfirm that the child has ADHD. Thirdly, continuous performance tasks contribute very little to understanding how a child is actually functioning in a school or home setting and typically have little utility in the evaluation of an intervention. Thus, Landau & Burcham (in press) suggest that despite the intuitive appeal of computer-driven continuous performance tests, their use should be limited to a small role in the problem identification stage of assessment if used at all.

Medication monitoring

Many children with ADHD will experience a trial of medication, so diagnostic teams should be prepared to assist in the monitoring of medication effects. Swanson, McBurnett, Wigal, Pfiffner, Lerner, Williams, Christian, Tamm, Willcutt, Crowley, Clevenger, Khouzam, Woo, Crinella, & Fisher (1993) report what should be expected and what should not be expected when children are treated with stimulant medication, the most common pharmacological therapy for children with ADHD. Swanson, et. al. (1993) are clear to point out that stimulant medication provides management of diagnostic symptoms and at least temporary improvement of associated problems such as compliance, social interactions (e.g. decreased negative behavior) and academic productivity. At the same time, it is noted that stimulant medications do not improve learning or thinking skills nor do they enhance academic achievement directly. These medications do not improve athletic skills nor do they improve positive social skills. Diagnosticians can perform very beneficial services to a child and family by being knowledgeable about stimulant medication.

Many physicians tend to rely on anecdotal reports from parents to determine proper dosage of medication. Diagnosticians who collect data systematically to evaluate dose effects provide another useful service to children, families and the health care community. In addition, stimulant medication often produces side effects and frequently school personnel are the only adults in the child's life that may witness them since many children do not take medication after school. Thus, it is essential for individuals on the diagnostic team to coordinate monitoring of the dose effects as well as understand the potential side effects of stimulant medication. Consequently, there have been recent proposals to expand the role of nonphysicians in the prescription of psychopharmacological therapies to children in school including greater collaboration between physicians and school personnel in medication monitoring and management (DeMers, 1994).

Children with ADHD who are not positive responders to stimulant medication may receive trials of other pharmacological therapy such as antidepressants or antihypertensive drugs. At times, stimulant medication is used in combination with these other drug therapies. It is important for individuals on the diagnostic team to be aware of dosing, special features and side effects of typical medications and medication combinations used in the treatment of ADHD.

There are many methods available to diagnosticians to aid in evaluating the effects of medication during the problem evaluation stage of assessment. It should be emphasized that documentation of improved behavior is insufficient. The impact of the medication on the amount and accuracy of school work should also be assessed. Gadow, Nolan, Paolicelli, & Sprafkin (1991) provides a description of a school-based model of medication evaluation involving both rating scales and direct observation. Parker (1992) also outlines strategies for monitoring medication effects at school. Other school-based strategies such as the monitoring of work completed and frequency counts of out-of-seat behavior can provide concrete documentation to professionals attempting to manage the child's psychopharmacological therapy.

PROMISING ASSESSMENT PRACTICES

School-based practices

The United States Department of Education, Office of Special Education Programs charged the Human Development Institute at the University of Kentucky to identify and report promising public school identification and intervention practices that positively impact children and youth with ADHD (Burcham, Carlson & Milich, 1993). In addition to intervention practices and locally prepared and commercial material that seem promising in serving students with ADHD, the final report for the project, as reported by Burcham & Carlson (1993), describes nine identification practices that show promise in assessing children and youth with ADHD in school settings. (The document, Promising Practices in Identifying and Educating Children with

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Attention Deficit Disorder is available through the ERIC Document Reproduction Service at 1-800-443-ERIC as well as Special Net and CompuServe, which serve as national on-line information services.)

The local school sites that were selected to have promising identification protocol were quite diverse demographically. In addition, a few districts had access to considerable resources while others made creative use of available human and material resources. Some districts focused on early screening procedures, others emphasized identifying children with ADHD under the IDEA in special education after thorough documentation of modifications and support in the regular program, while still others focused on Section 504 identification procedures. Regardless of orientation, all were committed to providing appropriate identification and educational services to students with ADHD.

An example of a promising assessment practice, namely the Broward County (FL) School Model, is described below. Their model is based on the use of the Intervention Assistance Team (IAT) concept and is consistent with the problem-solving paradigm outlined in this paper.

Each school in Broward County designates a contact person to whom all requests for assistance are made. This contact person reviews each request and channels it to the school's IAT. The team then enters into problem identification and problem analysis by reviewing school records, conducting interviews, completing direct observations, and collecting behavioral rating scale data. The team then develops an action plan. The plan may include such strategies as further clarifying child characteristics or environmental factors that could be interfering with the child's progress, implementing and evaluating classroom interventions, or referring the child and/or family to an outside service agency. If this level of intervention is insufficient to meet the child's needs, the case is re-reviewed by the IAT.

The IAT evaluates the concerns based upon data that are collected. It is then determined, in collaboration with the family, if the student meets the 504 classification as a qualified individual with disabilities. If the child is considered an appropriate candidate for 504 services, parents, teachers, and support personnel collaborate in planning accommodation strategies that meet the child's needs, and then develop a 504 Accommodation Plan. This plan may include variations in lesson presentation, behavior modification strategies, medication monitoring, organizational strategies, and so on. Special considerations are also addressed such as teacher or support staff training needs. The plan is based upon what can be done to create an environment where the child can be educated successfully. A school-based case manager is assigned to monitor plan implementation and success.

If the prescribed accommodations are unsuccessful, the case is re-reviewed by the IAT. The team, including the family, makes one of two decisions. First, interventions may be re-designed and modified on the accommodation plan and the student would continue service with monitoring by the designated case manager. The other option is to explore alternatives that may be appropriate for the child. This may include considering services under the IDEA, special education programs, remedial academic support services, services in a dropout prevention program as well as a host of other programs.

The Broward County Board of Education has taken a clear position that most students with ADHD can be educated in the regular program if provided with appropriate interventions to support their educational experience. Evaluation of these interventions is viewed as an essential component of the assessment process.

The Broward County Public Schools have developed a range of materials that describe its school-based identification plan. These include a handbook outlining procedures used to implement Section 504, a series of forms that enable schools to comply with the guidelines, and a videotape that illustrates the process. For more information regarding these materials contact: Dr. Merrick Kalan, 600 S.E. 3rd Ave., 8th floor, Ft. Lauderdale, FL 33301.

Clinic-based practice

The University of Kentucky Medical Center (UKMC) Children's Hyperactivity Clinic strives to provide a model of best practice clinic-based assessment for individuals suspected of having ADHD and/or associated disorders. Comprehensive family and individualized patient care is the goal of the clinic. Interdisciplinary evaluation teams assess and analyze referral concerns, develop treatment strategies and monitor the effectiveness of designated interventions. This protocol is consistent with the problem-based assessment paradigm discussed earlier in this paper.

The UKMC Children's Hyperactivity Clinic has entered into a collaborative arrangement with the University of Kentucky's School Psychology Training program through a grant awarded by the United States Department of Education. This arrangement allows an educational perspective to be a systematic component of the assessment and treatment of children referred to the clinic. School psychology trainees provide input regarding learning, social and behavioral issues while serving as a liaison between the schools and the medical community. At the same time, school psychology trainees are exposed to a wide range of medical issues such as medication and evaluation of co-morbidity that further equip them to serve children and youth with ADHD and their families.

When families initially contact the clinic, they are assigned to a lead clinician who focuses on defining the nature of the referral concerns. This is accomplished by interviews with the child, the parents, and other involved adults when appropriate. A thorough health and developmental history is taken by the clinician and a series of screening questionnaires, developed by clinic staff, are administered. Standardized assessment tools such as behavior rating scales and instruments to assist in evaluating coexisting conditions, such as anxiety, depression, tourette syndrome and conduct disorder are also administered as needed. Medical conditions are carefully screened at this point. School-based data is collected via the school psychology training program. This includes information from teacher consultations, direct observation of the student, and a review of school records. A DSM diagnosis is typically made during this initial stage of the evaluation.

The evaluation team then moves to problem analysis, integrating information obtained during problem identification and determining if additional information is needed. The clinician may present individual case studies at regularly scheduled case conferences to analyze problems and profit from group problem solving. Based upon available data, intervention plans are developed by the evaluation team, which includes the family. Services routinely offered at the clinic include medication consultation and management, psychoeducational assessment, family or individual counseling, consultation, a variety of groups for children, youth and families, and referral information. The clinic has recently been involved in not only offering services on-site at the clinic, but extending specific services to community-based sites such as schools.

The UKMC Children's Hyperactivity Clinic supports families in implementing agreed-upon treatment plans, whether these strategies are clinic-, home- and/or community-based. The school psychology project provides a mechanism to support school personnel in the implementation of the school-based component of treatment recommendations. Careful attention is paid to pharmacological treatment plans at this stage of the assessment. Data is collected from teachers and parents to determine dose effects as well as any emergence of side effects. Monitoring of the ADHD and co-morbid disorders is critical during this time.

During the final stage of assessment, problem evaluation, clinic personnel, in collaboration with families, determine the extent to which treatment plans are successful. If interventions are unsuccessful, problem analysis is re-visited. Often additional data is collected and treatment plans modified. A variety of mechanisms are used to evaluate treatment efficacy including data from rating scales, interviews, direct observations and a variety of school-based data such as number of discipline referrals or percent of work completed pre and post intervention.

Families served by the UKMC Children's Hyperactivity Clinic are encouraged to participate as partners in the assessment and treatment process. Parents are viewed as having unique expertise regarding their children and the information they offer is valued. (For more information regarding the University of Kentucky's Children's Hyperactivity Clinic, contact the co-directors of the clinic: Richard Welsh, L.C.S.W. or Catherine Martin, M.D. at University of Kentucky Medical Center, Outpatient Psychiatry, Annex 2, Room 206, Lexington, Kentucky 40506-0080; telephone: 606-323-6060).

SUMMARY

Accurate and effective identification of children and youth with ADHD involves a comprehensive assessment process involving multiple professionals administering multiple assessment techniques to numerous informants in a variety of settings. This paper has argued for an approach to assessment that is not only comprehensive but also linked to successful accommodations in both home and the school. The multiple steps of the problem-solving assessment process advocated here require the cooperation and collaboration of school personnel, health care providers and family members. Such a comprehensive approach is necessary in order to accomplish the differential diagnosis of a child's attentional difficulties and to identify the nature and extent of the accommodations necessary to optimize academic and social performance. Despite the extensive history and prevalence of children's attentional difficulties, misconceptions still abound and the potential for misdiagnosis remains. The remedy to such misconceptions and misdiagnosis is the preparation of assessment personnel knowledgeable about ADHD and its associated behavioral disorders as well good assessment strategies plus a setting (either medical or educational) that encourages use of a comprehensive assessment process.

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APPENDIX F

General Information for Parents and Teachers

1. Attention Deficit Disorder: What Parents Should Know
2. Attention Deficit Disorder: What Teachers Should Know

ATTENTION DEFICIT DISORDER: WHAT PARENTS SHOULD KNOW

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ATTENTION DEFICIT DISORDER:

What Parents Should Know

Identifying ADD

If you believe your child shows signs of Attention Deficit Disorder — short attention span, impulsive behavior, and hyperactivity — there are several steps you can take. Since most children occasionally show some of these signs, ask yourself if the behavior you are concerned about is persistent and if your child consistently exhibits such behavior in most settings.

If so, you should first consult with others who know the child well, such as relatives and family friends. Talk to them about the ADD behaviors and have them indicate the ones they see your child regularly exhibit. You also may want to keep notes on your child's behavior.

Next, speak to your child's teachers, as many behaviors characteristic of ADD are most visible in the classroom. Your child's teachers may want to complete a checklist on ADD signs, or use their own experience with other children with ADD to help you reach some conclusions of your own. In many cases, teachers may be the first to suspect a child has ADD and notify the parent(s). Keep in mind that some children show behaviors similar to children with ADD when they have learning problems stemming from other causes.

In addition, you should consult with a physician or other health care provider. A doctor will know the medical signs of ADD and can recommend local sources of information or a psychologist for your child to see. The physician should give your child a general medical exam and perhaps recommend a neurological evaluation, if he believes it necessary.

Your Child with ADD in School

There are two primary Federal laws applying to the education of children with ADD, the Individuals with Disabilities Education Act (IDEA) and Section 504 of the Rehabilitation Act of 1973. These laws are discussed in "Attention Deficit Disorder: Adding Up The Facts," which is also in this information kit.

If you believe that your child has a disability whether resulting from ADD or any other impairment, and the school district believes that your child may need special education or related services, the school district must evaluate your child. If the school district does not evaluate a child, it must notify the parents of their due process rights. According to federal law, a school is responsible for providing an educational diagnosis of a child. To determine a child's level of disability and best treatment, a multi-disciplinary team is formed that includes teachers, parents, and someone with training in child psychopathology (usually the school psychologist or school social worker).

At the meeting with these professionals, you should have your notes on your child's behaviors with you; and you also should bring report cards and any comments about your child made by teachers. Later, you may have the opportunity to fill out a standardized rating scale that compares your child's behaviors to those of children already diagnosed with ADD. Ideally, the team should follow a two-tiered approach to first determine the presence of ADD symptoms and then to determine its adverse effect on academic performance.

Once your child is evaluated and determined to have ADD, the school and the teacher may design modifications in your child's classroom and schoolwork based on his or her needs and abilities. The school may provide assistance and training in study skills, classroom management, and organization. A student should have access to a continuum of services, from pull-out programs that give the student individualized attention in a resource room to related aids and services provided in the classroom. Teachers have found that in order to help children with ADD they frequently need to make modifications in the lesson, its presentation, and its organization as well as specialized behavioral management.

Parents and teachers should work together and communicate frequently with one another to form a complete picture of a child and to note changes in his or her behavior. If your child is taking medication, you should request notes on his or her progress and notify the school of any changes in medication. Since children with ADD have difficulty obeying two different sets of rules, parents and teachers should agree on the same rules and the same management system. If your child's teachers do not have much knowledge about ADD, you should meet with them, explain your child's problems, and give them copies of this information sheet and other sources of information on ADD.

Medication: Pros and Cons

Medication of children with ADD remains controversial. Medication is not a cure and should not be used as the only treatment strategy for ADD. While doctors, psychiatrists, and other health care professionals should be consulted for advice, ultimately you must make the final decision about whether or not to medicate your child.

The short-term benefits of medication include a decrease in impulsive behavior, in hyperactivity, in aggressive behavior, and in inappropriate social interaction; and an increase in concentration, in academic productivity, and in effort directed toward a goal.

However, studies show that the long-term benefits of medication on social adjustment, thinking skills, and academic achievement are very limited. If you do choose to use medication, you should observe your child for possible side effects. Some children lose weight, lose their appetite, or have problems falling asleep. Less common side effects include slowed growth, a tic disorder, and problems with thinking or with social interaction. These effects usually can be eliminated by reducing the dosage or changing to a different medication.

Strategies for the Home

Children with ADD can learn to control some aspects of their behavior and to succeed in school and at home. When parents establish and enforce a few rules and maintain a system of rewards, children incorporate such rules into their daily routine. Remember that every child, with or without ADD, has individual strengths and weaknesses. Once you identify your child's strengths, you can use them to build your child's self-esteem and help to provide the confidence your child needs to tackle whatever he or she finds difficult.

- Discipline can best be maintained by establishing a few consistent rules with immediate consequences whenever each rule is broken. Rules should be phrased positively in terms of what your child should do. Praise your child and reward him or her for good behavior.
- Children with ADD respond well to a structured system of rewards for good behavior. This system encourages the child to work in order to earn privileges or rewards he or she wants by accumulating points for desired behaviors and removing points for undesirable behaviors. You can make charts or use tokens or stickers to show your child the consequences of good behavior. You should only work on a few behaviors at one time and add additional behaviors as others are learned.
- Make a written agreement (a contract) with your child in which the child agrees to do his or her homework every night or to demonstrate other desired behavior in return for a privilege he or she selects, such as the right to watch a certain television show. If your child does not fulfill the contract, remove the promised privilege.
- Another effective strategy is to provide a specified time-out location for your child to go when he or she is out of control. This should not be seen as a place of punishment, but as a place the child uses to calm down. Younger children may need to be told to go the time-out location, but older children should learn to sense when they need to calm down and go on their own.
- Set up a study area away from distractions and establish a specific time each day for the child to do homework. Do not allow your child to do

homework near the television set or the radio

- Devise a calendar of long-term assignments and other tasks. Keep this on the refrigerator door, or other visible place, where it can remind your child of what he or she needs to do.
- Have the teacher make a checklist of homework to be completed and items to be brought to school the next day. Before your child goes to bed, check the list to make sure everything has been completed.
- In general, punishing the child is not as effective as using praise and rewards. Rather than focusing on weaknesses, you should assist your child in developing personal strengths.
- Avoid emotional reactions such as anger, sarcasm, and ridicule. Remember your child has problems with control, and it only makes him or her feel worse to be told a task is easy or anyone can do it. However, short, mild reprimands can remind children to focus their attention.

Preparation for Adulthood

Children with ADD may require additional help in managing the transition to independent adulthood. They may need help learning how to structure their time and how to prioritize what they have to do. As children grow older, you can give them more responsibility so they can learn from their own decisions.

The hard work of children with ADD, their parents, and their teachers helps them develop their abilities and prepares them for success in their adult lives. With assistance, children with ADD can develop strategies that allow them to work around their ADD and the problems it causes.

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ATTENTION DEFICIT DISORDER: WHAT TEACHERS SHOULD KNOW

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ATTENTION DEFICIT DISORDER:

What Teachers Should Know

The child who repeatedly disrupts your class and who seldom completes assignments may not be deliberately troublesome, but could be showing signs of Attention Deficit Disorder (ADD). Similarly, a student who constantly stares out of the window might not be intentionally ignoring you, but instead could be demonstrating behavior caused by ADD. This disorder causes impulsive behavior, difficulties in focusing attention, and sometimes hyperactivity. Fortunately, when ADD is identified correctly, a program that combines supervised medication and teaching strategies designed to modify behavior can lead to success in the classroom.

Like other children with disabilities, students with ADD are helped best when the teacher understands the students' special problems and makes some modifications to the instructional program. However, you do not have to face these challenges alone; teachers work as part of a team that includes administrators, special educators, school psychologists, health care professionals, and the parents.

Identifying ADD in Your Students

Many children with ADD are not identified until they enter school. A child's impulsiveness, inattention, and hyperactivity are most visible in the classroom because they interfere with learning. While teachers are not required to make the final diagnosis of ADD, you can help these children by recommending that a child who frequently demonstrates these behaviors be checked for ADD or other learning problems. Specialized teaching strategies can also work even before formal identification of the child's problem.

The students who should be referred to specialists are those who persistently do not listen and those who give the impression of not knowing what is happening in class. Such children may have difficulty determining what is important and focusing on it. While other children occasionally may become bored with a topic and stop paying attention for a time, children with ADD appear distracted frequently and for long periods of time, regardless of the tasks assigned. Children with ADD have difficulty concentrating on a task and often move from one assignment to another without finishing any work. They behave impulsively, without pausing to think about the consequences of their actions. In general, a child with ADD seems immature, his or her behavior resembles that of a younger child.

Many children with ADD are hyperactive, fidget when seated, and constantly run around in the classroom. Overexcited, they cannot wait their turn and blurt out answers to questions without waiting for the teacher to call on them. These characteristics are persistent, present in different settings and with different activities, and severely interfere with the child's learning.

If you suspect a student's behavior is caused by ADD or another learning disorder, it is helpful to keep a diary of the child's behavior for documentation, noting how much work the student completes and how often the student leaves his seat. Write down the time of each disturbance and the activity the child was supposed to be doing.

Other factors may cause student behavior that resembles symptoms of ADD; they include child abuse, drug use, prolonged deprivation, disorganized or limited home or school environments, and other developmental problems and psychological disorders. Therefore, consult with the school's special education staff and psychologist to see if they know of other circumstances that explain the behavior. Show them your notes on the child's behavior and how those notes show possible signs of ADD. Explain how you attempted to resolve the problems and how the student responded.

Contact parents early in the process to

describe the problems with the child. They may have already investigated their child's behavior or have concerns of their own. They may have information that can help explain other factors influencing the behavior.

If the child behavior specialist or the parents decide that the child should be systematically checked for ADD, the administration will call a conference with a team of parents, teachers, administrators, health care professionals, school psychologists, and other specialists. Your role at this conference is to describe the behavior you observed and how that behavior is interfering with the child's learning.

During the evaluation process, you may be asked to complete a standardized rating form and answer questions about the child and his or her behavior. You may also be asked to try other classroom accommodations and evaluate their effects on the progress of the child. A specialist in ADD will come to the classroom to observe the student's behavior. In addition, if the team decides the child has ADD, you will play a major role in designing a specialized plan to improve the child's academic performance.

Medication in the Classroom

Between 60 and 90 percent of students with ADD are treated with some form of medication. Due to legal issues, a teacher should not recommend medication; however, you may suggest the parent take the child to a doctor for examination.

If medication is prescribed by a doctor, ask parents about the type of medication prescribed, when the medication is to be taken, and what side-effects might develop. A proper dose of medication should not make the child sleepy or lifeless, but should enable the child to focus on his or her work without being easily distracted.

While medication can reduce children's hyperactive behavior temporarily, it does not solve the academic problems experienced by children with ADD, and most studies show that medication has few long-term benefits on academic achievement and social adjustment. Instead, medication is a tool that facilitates the use of other methods for helping students with ADD. For example, a child will complete more work when the child's academic schedule is coordinated with the medication so that most of his or her schoolwork can be finished while the medication is calming the child's behavior.

The child should not take the medication without an adult present, and your school's policy may require the school nurse to administer the medicine. The school or the parents should inform all of the child's teachers about the medication so they can be alert for side-effects and medical problems.

Secrets of Successful Schools

The schools that are most successful in helping students with ADD make certain that individual student differences are reflected in the design of their education plans. The teachers and administrators demonstrate a common commitment to working with students with ADD, understand the complexity of the disorder, and believe strongly in the services they are providing to all children. Such schools work as a team to deal effectively with students with ADD by matching techniques and modifications to students' individual potential and methods of learning. Since students with ADD often are rejected by their fellow students, successful schools train students with ADD in social skills and pair them with non-ADD peers. These schools serve as partners for parents and develop a common understanding of goals and objectives, as well as a common plan to carry out those objectives and communicate any progress or problems.

Responsive schools organize their programs and instruction to meet the special needs of all students, including those with ADD. In redesigned programs, the entire class participates in a management system that does not separate the child with ADD from the rest of the group. Programs range from a simple "target behavior of the day" with an immediate reward system to an elaborate system of "levels," in which each level has specific rules and privileges. Schools vary their activities, use cooperative learning and games as part of their strategy, and provide additional training for teachers who need it.

Many schools use a checklist to help classroom teachers, special education teachers, and parents communicate. One school developed a system in which parents reward at home their child's behavior in school. Parents in that school meet with teachers and come to a mutual agreement about targeting certain specific behaviors. During class, the teacher monitors and evaluates students' behavior. The children are given feedback and notes on their behavior, and they gain or lose privileges at home based on their behavior at school.

Successful schools realize that students with ADD are not "problem children," but children with a problem. They encourage the school, parents, and teachers to work together with the child with ADD in order to help that child develop skills and work habits that he or she will need to be successful in school and in life.

Classroom Strategies for a Class with Students with ADD

You do not have to wait for a formal decision to evaluate the child for ADD before starting these strategies. Many of these will be effective even if the student does not have ADD but has other problems causing inattention, distractibility, and/or hyperactivity.

Teachers work with a team of parents, administrators, special educators, school psychologists, health care professionals, and other child professionals to support their efforts. This team will help you develop accommodation plans that may modify the physical arrangement of the classroom, lesson presentation, work assignment, test-taking methods, or classroom management as necessary. The plan will specify what accommodations will be made and how the team will work together.

Students with ADD, and other attention or behavior problems, do best in a structured classroom — one where expectations and rules are clearly communicated to them, and where academic tasks are carefully designed for manageability and clarity.

- In addition, teachers can break down assignments into smaller, less complex units, and build in reinforcement as the student finishes each part. Students with ADD may need more time (especially on tests) than other students. You can give a student confidence by starting each assignment with a few questions or activities you know the student can successfully accomplish.
- Some teachers have found that pairing a student with ADD with another student or dividing the class into cooperative groups can be an effective way to encourage the student to concentrate on the work.

Individual Strategies for Helping Students with ADD Learn

- Because no two children with ADD are alike, no single educational setting, practice or plan will be best for all children. Instead, teachers can help all students by identifying students' individual strengths and special learning needs and designing a plan for mobilizing those strengths to improve students' academic and social performance.
- Although students with ADD are easily distracted, simple methods can help them focus their attention. These include: placing students near your desk or in the front row; maintaining eye contact with the students; using gestures to emphasize points, and providing a work area away from distractions. Reduce the amount of materials present during work time by having the student put away unnecessary items. Have a special place for tools, materials, and books.
- Students may need both verbal and visual directions. Provide the child with a model of what he or she should be doing. Periodically remind the student of the assignment.
- You can help students shift from one task to another by providing clear and consistent transitions between activities or warning students a few minutes before changing activities. Similarly, when you ask a student with ADD a question, begin the question with the child's name and then pause for a few seconds as a signal to the child to pay close attention.
- Recent research suggests that providing more stimulation and variety can improve the performance and behavior of students with ADD. You can alter the type of assignment, the activities involved, or even the color of the paper used.
- Communication with parents is essential when working with ADD. A simple way to improve communication is to use a checklist system for parents that records when a student achieves a goal or objective, such as arriving on time, being prepared, and completing classroom work. For each subject, the child should write down the homework and then show it to the teacher so that it can be checked for correctness. At the end of the class, repeat the homework assignment ou

loud as a reminder. Parents will then use the checklist to ensure the child completes the homework.

- Students with ADD may need more help than their peers in learning strategies to help them study and organize their work more efficiently. Help in these areas may include focusing on listening skills, outlining structure, task structuring, and notebook organization. Teach students techniques for taking notes from both lectures and textbooks. Some teachers have found it helpful to give their students an outline for their notes and to list the main ideas or concepts in advance.

How to Manage ADD Behavior

- Children with ADD respond well to a behavior management system in which rewards are given for good behavior. Reward systems encourage students to work toward earning privileges or rewards by gaining points for desired behavior and losing points for undesirable behavior. If you use this system with younger children, you may want to make charts or use tokens or stickers to show students the consequences and positive results of their behavior.
- An effective management system concentrates on a few behaviors at a time, with additional behavior patterns added when the first ones are mastered. The reinforcement is something the student is willing to work for (or to avoid). The teacher gives or removes points immediately, according to the behavior, so the child understands why he or she is being rewarded or punished. While older children may be willing to work toward a deferred reward, younger children may need immediate reinforcement.
- You can help children with ADD behave in a disciplined manner in the classroom by establishing a few rules which result in immediate consequences when they are broken. Give the child specific rules that are phrased positively in terms of what the child should do. When you praise and reward the student for good behavior and punish for inappropriate behavior, the child can see you apply the rules fairly and consistently.
- Another proven strategy used by teachers is to provide a specified time-out location to which the student can go when he or she is not in control. This should not be seen as a punishment but as a place for the student to go for a few minutes to calm down. Older students can be taught to sense when they are getting out of control and go to the time-out area on their own.
- For hyperactive children, you may want to establish active tasks such as cleaning the blackboard or leading the class to the lunchroom as rewards for good behavior.
- Since children with ADD have difficulty understanding different rules for different places, parents and teachers benefit from working together to develop a consistent set of rules and a similar management system. When teachers and parents communicate with each other about a child with ADD, they increase the likelihood that he or she will be able to learn effectively.

APPENDIX G

Myths and Facts About ADHD

1. Attention Deficit Disorder: Beyond the Myths
2. Attention Deficit Disorder: Adding up the Facts
3. Commonly Asked Questions About ADHD

ATTENTION DEFICIT DISORDER: BEYOND THE MYTHS

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ATTENTION DEFICIT DISORDER: Beyond the Myths

MYTH: **Attention Deficit Disorder (ADD) does not really exist. It is simply the latest excuse for parents who do not discipline their children.**

FACT: Scientific research tells us ADD is a biologically-based disorder that includes distractibility, impulsiveness, and sometimes hyperactivity. While the causes of ADD are not fully understood, recent research suggests that ADD can be inherited and may be due to an imbalance of neurotransmitters — chemicals used by the brain to control behavior — or abnormal glucose metabolism in the central nervous system. Before a student is labeled ADD, other possible causes of his or her behavior are ruled out.

MYTH: **Children with ADD are no different from their peers; all children have a hard time sitting still and paying attention.**

FACT: Before children are considered to have ADD, they must show symptoms that demonstrate behavior greatly different from what is expected for children of their age and background. They start to show the behaviors characteristic of ADD between ages three and seven, including fidgeting; restlessness; difficulty remaining seated; being easily distracted; difficulty waiting their turn; blurting out answers; difficulty obeying instructions; difficulty paying attention; shifting from one uncompleted activity to another; difficulty playing quietly; talking excessively; interrupting; not listening; often losing things; and not considering the consequences of their actions.

These behaviors are persistent and occur in many different settings and situations. Furthermore, the behavior must be causing significant social, academic, or occupational impairment for the child to be diagnosed educationally as having ADD.

MYTH: **Only a few people really have ADD.**

FACT: Estimates of who has ADD range from 3 to 5 percent of the school age population (between 1.46 and 2.44 million children.) While boys outnumber girls by 4:1 to 9:1, experts believe that many girls with ADD are never diagnosed.

MYTH: **ADD can be prevented.**

FACT: While scientists are not certain they understand the causes of ADD, they have ruled out most of the factors controlled by parents. A poor diet does not cause ADD; nor does sugar or food additives. Normal quantities of lead will not cause ADD. Since the causes of ADD are genetic and biological, the parents cannot cause ADD by being too strict or too lenient.

However, actions by the parents can influence the child's ability to control his or her ADD behavior. Recently, some studies suggest a few cases of ADD may be caused by the use of alcohol and drugs by the mother while pregnant.

MYTH: **All children with ADD are hyperactive and have learning disabilities.**

FACT: While 10 to 33 percent of children with ADD also have learning disabilities, the two disorders cause different problems for children. ADD primarily affects the behavior of the child — causing inattention and impulsivity — while learning disabilities primarily affect the child's ability to learn — mainly in processing information.

Not all students with ADD are hyperactive and constantly in motion; many are considered to have undifferentiated ADD (Attention Deficit Disorder without hyperactivity). Because these children do not behave in the same way as hyperactive ADD students, their disorder frequently is not recognized, and they are often considered unmotivated or lazy.

MYTH: Many children are incorrectly diagnosed as having ADD.

FACT: There are several national psychological tests that schools use to identify students with ADD. Children suspected of having ADD are referred to a child specialist (e.g., school counselor, psychologist, pediatrician) for clinical evaluation. Observations and reports from parents and teachers are critical to proper diagnosis. Sometimes, children are given intelligence, attention, and achievement tests. Doctors may also administer neuropsychological tests and neurological examinations.

Most importantly, it is a team of professionals in education, medicine, and psychology who pool test results and make a final determination. Since a child's hyperactivity, distractibility, and impulsive behavior may be due to other factors, such as a limited home environment or learning problems, the specialists check for other causes of these behaviors before making a diagnosis of ADD.

MYTH: Medication can cure students with ADD.

FACT: Medicine cannot cure ADD but can sometimes temporarily moderate its effects. Stimulant medication such as Ritalin, Cylert, and Dexedrine is effective in 70 percent of the children who take it. In those cases, medication causes children to exhibit a clear and immediate short-term increase in attention, control, concentration, and goal-directed effort. Medication also reduces disruptive behaviors, aggression, and hyperactivity.

However, there are side effects and no evidence for long-term effectiveness of medication. For example, recent studies show that medication has only limited short-term benefits on social adjustment and academic achievement. While medication can be incorporated into other treatment strategies, parents and teachers should not use medication as the sole method of helping the child.

MYTH: The longer you wait to deal with ADD in students, the better the chances are that they will outgrow it.

FACT: ADD symptoms continue into adolescence for 50-80 percent of the children with ADD. Many of them, between 30-50 percent, still will have ADD as adults. These adolescents and adults frequently show poor academic performance, poor self-image, and problems with peer relationships.

MYTH: There is little parents and teachers can do to control the behavior of children with ADD.

FACT: Teachers and parents have successfully used positive reinforcement procedures to increase desirable behaviors. A behavioral modification plan can give the child more privileges and independence as the child's behavior improves. Parents or teachers can give "tokens or points" to a child exhibiting desired behavior — such as remaining seated or being quiet — and can further reward children for good school performance and for finishing homework. Mild, short, immediate reprimands can counter and decrease negative and undesirable behaviors. Students with ADD can learn to follow classroom rules when there are preestablished consequences for misbehavior, rules are enforced consistently and immediately, and encouragement is given at home and in school.

MYTH: Students with ADD cannot learn in the regular classroom.

FACT: More than half of the children with ADD succeed in the mainstream classroom when teachers make appropriate adjustments. Most others require just a part-time program that gives them additional help in a resource room. Teachers can help students learn by providing increased variety. Often, altering features of instructional activities or materials, such as paper color, presentation rate, and response activities, help teachers hold the attention of students with ADD. Active learning and motor activities also help. ADD students learn best when classroom organization is structured and predictable.

ATTENTION DEFICIT DISORDER: ADDING UP THE FACTS

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ATTENTION DEFICIT DISORDER: Adding Up the Facts

In any group of children, there is usually one child who never sits still. Frequently and easily distracted, the child fidgets, glances about aimlessly, and seems to allow his mind to wander freely. This child attracts the predictable adult response: "Why can't you sit still and listen!" In school, the often bright but disruptive "troublemaker" may never learn to listen or do what others seem so effortlessly to do — pay attention.

What Is ADD?

Impulsive behavior, a tendency to be distracted, and hyperactive movement may not be the conscious choice of a "disruptive" child. These behaviors are symptoms of a condition called Attention Deficit Disorder (ADD). It is the disorder, not the child's own will, which is the true culprit, since it literally disrupts a child's ability to concentrate.

In its most commonly diagnosed form, ADD is accompanied by hyperactivity and is sometimes called Attention Deficit Hyperactivity Disorder (ADHD). In addition to the inability to concentrate and the tendency to behave impulsively, children with ADHD have difficulty remaining still for even short periods of time. While these children are inattentive, fidgety, spontaneous to a fault, forgetful, and easily distracted, their "misbehavior" is not a choice but a result of the disorder.

School children with ADD often have multiple problems with schoolwork and social activities. They focus on their teacher only with great difficulty. They have trouble remaining seated, following instructions, concentrating on a single task, waiting for their turn in any activity, and simply finishing their assigned work. While these behaviors are not in themselves a learning disability, 10 to 33 percent of all children with ADD also have learning disabilities.

Children with ADHD are often aggressive and rejected by their peers, while children with ADD (without hyperactivity) are more withdrawn and unpopular. Both types of children with ADD commonly do not cooperate with others and are less willing to wait their turn or play by the rules. Their inability to control their own behavior may alarm themselves and other children and cause them to become isolated. As a result, their self-esteem suffers.

There are an estimated 1.46 to 2.46 million children with ADD in the United States (3-5 percent of the student population). Most are boys (ADD is diagnosed four to nine times more often in boys than in girls); and because they are less disruptive than children with ADHD, many children who have ADD without hyperactivity go unrecognized and unassisted.

ADD, however, is not limited to children, although for years it was assumed to be a childhood disorder, visible as early as age three, that disappeared with the advent of adolescence. It is now known that many children with ADD do not grow out of it as they age.

Although ADD is a serious and persistent disorder, research indicates children with ADD can be helped. The first step is the recognition that ADD exists — that it is real. The understanding that follows recognition must then lead parents, teachers, school administrators, psychologists and health care professionals to learn to work together for the good of the child. As a team, they can guide the child in developing techniques that can turn repeated failure into continuous progress.

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What Behaviors Does ADD Cause?

While much of the behavior attributed to ADD also is found in children without ADD, there are several important and distinguishing characteristics that reveal the presence of the disorder. Children with ADD are impulsive, hyperactive, and distractable beyond what is considered "normal" for their age. They exhibit extreme behavior in many different settings and situations over a long period of time. While this behavior often is observed before children start school, it becomes extremely visible in the more structured school environment.

In addition, the American Psychiatric Association (APA) maintains ADD can be defined by the behaviors it causes. They include, for example, the following:

- Fidgeting with hands or feet or squirming in their seat (adolescents with ADD may appear restless);
- Difficulty remaining seated when required to do so;
- Difficulty sustaining attention and waiting for a turn in tasks, games or group situations;
- Blurting out answers to questions before the questions have been completed;
- Difficulty following through on instructions and in organizing tasks;
- Shifting from one unfinished activity to another;
- Failing to give close attention to details and avoiding careless mistakes;
- Losing things necessary for tasks or activities; and
- Difficulty in listening to others without being distracted or interrupting.

Children with ADD show different combinations of these behaviors. For instance, children with ADD without hyperactivity do not show excessive activity or fidgeting, but instead daydream, are lethargic or restless, and frequently do not finish their academic work.

Not all of these behaviors appear in all situations. A child with ADD will be able to focus when he or she is receiving frequent reinforcement or is under very strict control. Ability to focus is also common in new settings, or while interacting one on one (including playing video games). While other children may occasionally show some signs of these behaviors, in children with ADD the symptoms are more frequent and severe than in other children of the same age. As children grow older, the behaviors affected by ADD change. A preschool child may show gross motor overactivity — always running or climbing and frequently shifting from one activity to another. Older children may be restless and fidget in their seats or play with their chairs and desks. They frequently fail to finish schoolwork, or work carelessly. Adolescents with ADD tend to be more withdrawn and less communicative. They are often impulsive, reacting on the spur of the moment without regard to previous plans or necessary tasks and homework.

How Can We Tell If A Child Has ADD?

Although very young children may show characteristics of ADD, some of these behaviors are in fact normal for their age. Even with older children, other factors, including environmental influences, can produce behavior resembling ADD. Therefore, a diagnosis of ADD cannot be made by teachers or school administrators acting alone, but rather by a team of professionals working with the parents and the child believed to have ADD. This team follows a two-tier evaluation process to first determine if the child has ADD and then to decide the best treatment for the child's individual educational needs.

Any diagnoses of ADD must be done by examining the child's history through interviews with parents, teachers, and health care professionals in order to determine when the behavior began and whether the child displays the behavior characteristics of ADD in many different settings.

To help with this, parents and teachers should complete a form asking them to measure and rate the frequency and severity of the child's behavior according to a fixed rating scale. The team will examine this information and determine a course of action agreed to by the parents. Physicians should perform a medical exam to check for problems with hearing or vision, and perhaps may administer neurological examinations. Parents are frequently requested to provide detailed family and developmental history as well as information about the child's abilities, interests, and behavior. A specialist should visit the classroom to observe the student's behavior and examine the amount of work accomplished over a set period of time. The specialist, frequently a psychologist, will assess the child, his or her ability to control his or her actions, and check for other emotional and learning disabilities.

While there is no single test for ADD, an accurate diagnosis can be made by combining observations, tests, and other measurements gathered from parents, teachers, psychologists, physicians, and the child.

Once the observation and testing is complete, the team will review the results and decide whether or not the child has ADD, and if the child needs special services. From this information, the specialists involved can develop a treatment and an education plan which directly address the child's learning problems and characteristic behavior.

What Causes ADD?

Studies on brain modeling and brain imaging show differences in the brains of children with ADD. However, the causes of these differences are not yet known. Most scientists suspect the cause of ADD is genetic or biological, although they acknowledge that environment helps determine the specific behaviors of an individual child.

Some believe ADD may be caused by an imbalance of neurotransmitters (chemicals used by the brain to control behavior) or by abnormal glucose metabolism in the central nervous system.

In addition, a child may develop ADD because of problems in the child's development before birth or neurological damage. Frequently, the same biological factors that influence ADD may also affect learning disabilities, since many children display signs of both. While some people claim that ADD is caused by food additives, sugar, yeast, or the actions of parents, there is no evidence to support these beliefs.

What Can We Do About ADD?

While there is no known cure for ADD, the effects of ADD can be reduced through an approach that combines medicine, psychology, and education. Medication produces a clear and immediate short-term effect in behavior, but should not be used as the only treatment, because the long-term effectiveness of drugs is unclear.

Stimulants such as Ritalin, Dexedrine, and Cylert allow the brain and nervous system to communicate with the rest of the body more effectively, which improves attention span, concentration, motor control, and on-task behavior, while reducing hyperactivity.

From 60 to 90 percent of school-aged children with ADD are treated with stimulant medication for a prolonged period of time. However, medication is not a total solution. While studies show that stimulants effectively calm 70 percent of children with ADD, this effect decreases over time, and most studies show that medication results in few long-term benefits on academic achievement and social adjustment.

In addition, medication may have side-effects. Some children lose weight, lose their appetite, or have problems falling asleep. Less common side effects include slowed growth, a tic disorder, and problems with thinking or with social interaction. These effects usually can be eliminated by reducing the dosage or changing to a different medication.

An effective non-medical treatment is to help children learn how to control their behavior. Many teachers and parents use a form of positive reinforcement in which the child is rewarded for good behavior. This sometimes is combined with negative reinforcement, in which the reward (or the points used to reach the reward) is removed for bad behavior. Children with ADD perform best when they have an organized structure with consistent rules so that they can clearly understand what they are doing and what they should do next.

Psychologists and social workers can work with children with ADD on their self-esteem, anxiety, and social skills. They can help children understand their problem and develop coping mechanisms to succeed.

Teachers, parents, doctors and other health care professionals can work together to devise a plan to improve behavior and to develop alternate methods of education. General teachers should work with special education teachers to establish methods for adapting their regular curriculum and teaching techniques to the needs and abilities of students with ADD. Parents and teachers should communicate regularly to avoid confusing children with ADD with different strategies and expectations.

How Does ADD Affect School Performance?

Children with ADD are usually identified in school only after they consistently demonstrate their failure to understand or follow rules or complete required tasks. The most common referrals to special education are those for children who frequently disrupt the class, show a lack of attention, and exhibit poor academic performance.

While ADD is not a learning disability, the difficulties students with ADD have in focusing their attention reduces the amount of work they can accomplish, even when they show strong academic ability. Studies demonstrate that the ability to concentrate and focus is a better predictor of academic success than other measures of academic ability. For example, if a student is distracted and does not finish a test, most teachers do not give credit for blank responses, even if the student knows the answers.

Other factors also interfere with the ability of children with ADD to learn. These children make careless errors and respond without thinking. They frequently have trouble judging the importance of different information, losing main ideas in a flood of trivia. Some children with ADD have difficulty with abstract ideas, including the concept of cause and effect. Other students frequently cannot manage several different tasks at once, are poorly organized, or lose objects needed to perform tasks.

On average, children identified as hyperactive are at least three times more likely to stay back a grade and be suspended from school than children without ADHD.

What Are The Legal Rights Of Children With ADD?

The Federal government has established several legal provisions that affect the education of children with ADD —the Individuals with Disabilities Education Act and Section 504 of the Rehabilitation Act of 1973. Students with ADD, like students with any other disability, do not automatically qualify for special education and related services under the IDEA without meeting certain conditions.

If a child with ADD is found not to be eligible for services under Part B of the IDEA, the requirements of Section 504 of the Rehabilitation Act of 1973 may be applicable if he or she meets the Section 504 definition of disability, which is any person who has a physical or mental impairment which substantially limits a major life activity such as learning. Thus, depending on the severity of their condition, children with ADD may or may not fit the definition of either or both laws; not all children with ADD are covered.

Although ADD is not a separate disability category under the IDEA, children with ADD who require special education and related services can be eligible for services under the "other health impaired" category of Part B of the IDEA when "the ADD is a chronic or acute health problem that results in limited alertness, which adversely affects educational performance." Children with ADD may also be eligible for services under the "specific learning disability" or "seriously emotionally disturbed" categories of the IDEA when they have those conditions in addition to their ADD.

These laws require schools to make modifications or adaptations for students whose ADD results in significant educational impairment.

Children with ADD must be placed in a regular classroom, to the maximum extent appropriate to their educational needs, with the use of supplementary aids and services if necessary. While children covered under the IDEA must have an Individual Education Plan (IEP), students covered under Section 504 need a less formal individualized assessment.

However, when important changes are made in the regular education classroom, about half the children with ADD succeed in that setting without special education. Such changes may include: curriculum adjustments, alternative classroom organization and management, specialized teaching techniques and study skills, use of behavior management, and increased parent/teacher collaboration. Of course, the needs of some children with ADD cannot be met solely within the confines of a regular classroom and they may need related aids or services provided in other settings.

What Happens To Children With ADD?

One-third to one-half of children with ADD continue to show signs of ADD as adults. While they may gain greater ability to focus their attention, their level of impulsive behavior remains inappropriate for their age. They frequently are unorganized, forgetful, and unproductive. ADD thus can affect its victim's college education, employment, and relationships with others. In fact, some adults with ADD were not diagnosed as children and recognize the disorder only when their children's similar problems are diagnosed as ADD.

Children With ADD Can Succeed

While children with ADD have greater difficulties than most other children, their problems can be reduced through early identification and careful treatment. Parents and teachers can help by remembering the child does not choose to behave disruptively. Children with ADD do want to control their behavior and do try to obey their parents and teachers.

Once parents and teachers understand this, and once they recognize that children with ADD are not lazy or "bad," but have a biological disorder, they can stop blaming themselves or their children and take appropriate steps to prevent a pattern of failure that leads to low self-esteem and hopelessness. Through the supervised use of medication, counseling, behavior management, and modification of classroom lessons, children with ADD can most certainly learn what they need to succeed as attentive and productive members of society. With adult patience, understanding, and assistance, children with ADD can indeed sit still and listen and learn.

COMMONLY ASKED QUESTIONS ABOUT ADHD

Background Information

1. What is ADHD?

According to Barkley (1990), "ADHD is a developmental disorder characterized by developmentally inappropriate degrees of inattention, overactivity, and impulsivity. These often arise in early childhood; are relatively chronic in nature; and are not readily accounted for on the basis of gross neurological, sensory, language, motor impairment, mental retardation, or severe emotional disturbance. These difficulties are typically associated with deficits in rule-governed behavior and in maintaining a consistent pattern of work performance over time." The specific criteria for this disorder are listed in the American Psychiatric Association's *Diagnostic and Statistical Manual* (*DSM-IV*).

2. Is ADHD a new disorder or condition?

No. Physicians, psychologists, parents, and educators have been concerned about this condition for over a hundred years, using an ever-changing variety of terms, labels, and definitions. . . but which essentially refer to the same behavioral disorder. Part of the current confusion is due to this use of different terminology in the past, i.e., Minimal Brain Damage, Minimal Cerebral Dysfunction, Minimal Brain Dysfunction, Hyperactivity, Hyperkinesis, or ADHD.

3. Does ADHD really exist?

Yes. Not every child who has academic or behavioral difficulties in school has ADHD, but it is a very real and significant problem for many children. Much of the controversy about the "reality" of ADHD stems from the various and sometimes conflicting approaches to definition, diagnosis, and treatment strategies. Aside from these theoretical and methodological differences, ADHD is a disability that can lead to academic and social difficulties if no intervention takes place.

4. What are classroom symptoms of ADHD?

In the past, much of the classroom focus was on the ADHD student's hyperactivity, i.e., excess fidgeting, talking-out, making noises, getting out of seat without permission. However, current research indicates that other symptoms are probably more significant in terms of the long-term potential for school problems, i.e., difficulty in focusing and maintaining attention, impulsivity, poor task completion, low frustration tolerance, poor organizational skills, difficulty in getting along with other children of the same age, decreased motor skills, and emotional difficulty.

5. **Are all children with ADHD hyperactive or overactive?**

No. Hyperactivity is a frequently present, but not essential, component of ADHD. However, not all children with ADHD are hyperactive, and some may not be overactive in all situations. In fact, some children with ADHD may demonstrate normal or even below-normal activity levels (daydreaming, staring into space, "spacing-out," etc.). Under the final DSM-IV criteria, some children may be diagnosed under the *predominantly inattentive* type.

6. **Do all children with ADHD demonstrate the same symptoms?**

No. The symptoms are variable for each child. In addition, some symptoms do not occur similarly in all situations, i.e., they may occur more frequently in group situations that demand sustained attention or impulse control (in the classroom, at church, or at a family meal). Conversely, they may disappear in other settings such as on the playground, playing video games, high interest classroom activity, or participating in a one-to-one interaction with an adult, such as a visit to a physician or school psychologist.

7. **Do children with ADHD have other problems?**

Many students with ADHD have associated problems, such as poor school performance, specific learning disabilities, poor coordination, social skill deficits, aggressive behavior, low self-esteem, increased physical complaints, depression, or avoidance of school activities. These symptoms may or may not be linked to ADHD. Secondary symptoms will vary for each child, and no two children with ADHD are the same.

8. **What are the causes of ADHD?**

There is no known single cause. Instead, there seem to be a number of possible factors. ADHD is a neurologically-based, developmental condition. That is, a child may be either born with the condition or symptoms may appear early in life. Researchers currently suspect that ADHD is associated with differences in neurotransmitters in the brain, especially dopamine and norepinephrine, which are essential to sustain attention, control motor activity, and prevent impulsivity. While the child's ADHD may be influenced by environmental factors such as noise or classroom activity, there is no scientific evidence that these factors cause ADHD.

9. **How many children have ADHD?**

Opinions and research differ on this issue. The commonly accepted view is that approximately 3 to 5 percent of children have ADHD, but some estimates are much higher. This means that, on the average, one child in every classroom in the United States may have ADHD. However, due to differences in definitions and diagnostic strategies, these estimates vary widely. Research also suggests that more boys than girls have ADHD, but the ratios here also differ widely depending on the study.

10. Will these children outgrow ADHD?

Some children appear to develop coping skills and adaptive strategies for their ADHD, often by adolescence. Some children may outgrow the core deficits of the disorder. However, ADHD may be a life-long factor for some individuals. Much of the currently published research is about children and adolescents with ADHD. As more data about the long-range implications of ADHD begin to emerge, it appears that the disorder may persist into adulthood and be associated with continued difficulties such as the ability to hold a job, substance abuse, and learning problems.

Diagnosis

11. How is the diagnosis of ADHD made?

The diagnosis of ADHD is made following a comprehensive evaluation of the child using data and information from a variety of sources. An effective evaluation for ADHD is a complex process of differentiating among a variety of factors; ruling out other possible explanations for the child's symptoms (family stressors, physical illness, school anxiety, etc.); and establishing a constellation of symptoms consistent with ADHD based on the definition above. The evaluation could include the following elements:

- Complete review of school records and family/social history;
- Individual educational/behavioral assessments as appropriate; and
- Psychological/medical evaluation as appropriate.

12. Is there a specific test for ADHD?

Currently, there is no specific test for ADHD. The clinician examines information from different sources and looks for the constellation of symptoms. When parents say that their child is "being tested for ADHD," they are probably referring to this process of integrating data from a variety of sources. There are behavioral checklists, ADHD rating scales, psychological tests for attention span and memory, but there is no definitive scientific test for assessing ADHD at this time.

13. Who is best qualified to diagnose ADHD?

ADHD should be diagnosed by a family physician or clinical psychologist who may refer the students to medical specialists if warranted. Other professionals such as teachers, principals, and school nurses may contribute valuable data to the evaluation process. Parents are often the first to suspect their child's attention problems.

14. What is the school's role in the diagnostic process?

The school's primary role in the diagnostic and treatment process is to provide a data base for use by the parents and their primary health care provider in making the diagnosis and other important decisions (such as monitoring progress and effectiveness of treatment and interventions, about the child). The school Child Study Team will develop and implement recommendations regarding educational placements and services with input from parents and the child's primary health care provider.

Intervention Strategies

15. What are the major intervention categories for ADHD and who provides them?

There are four general intervention categories. Research is very clear that these are typically most effective when they are implemented in combination, rather than singly. These include:

- Medical management and medication, provided by psychiatrists, neurologists, pediatricians, and/or nurse clinicians.
- Behavior modification and social skills training, provided by school psychologists, school nurses, school social workers, school counselors, and/or other school staff.
- Parent education and support, provided by school psychologists, school social workers, counselors, and/or parent support groups.
- Classroom interventions and accommodations and inservice training, provided by school staff, educational specialists, and/or instructional assistants or tutors.

The implementation of a comprehensive, integrated intervention plan for any child with ADHD requires cooperation, coordination, and communication among all the participants. In addition, building staff need inservice training regarding effective interventions and accommodations for children with ADHD.

16. Is there a cure for ADHD?

There is no cure for ADHD at this time. However, with the right combination of interventions, the frequency, intensity, and duration of the learning and behavioral problems associated with ADHD may be significantly reduced.

17. How are medication decisions made?

The decision as to whether to medicate a child for ADHD, as well as questions of dosage and type of medication, are made by the child's physician and parents. These clinical decisions are generally made on the basis of formal medical evaluation, anecdotal reports, and the use of various ADHD rating scales that may be completed by parents regarding behavior at home and by school staff regarding behavior at school. School staff may be asked to continue completing these rating scales even after the initial decision to medicate is made. This allows the physician to determine whether the medication is effective, if a dosage change is required, and whether to discontinue the medication. It is also a good idea to have more than one person (such as a classroom teacher, a school psychologist, and a paraprofessional) do ratings at school, to minimize the relative subjectivity of these scales.

18. Should school personnel ever recommend or require that a child be placed on or taken off medication?

No. This is a decision for parents and their physician. As with the issue of diagnosis, the school's role should be to provide a data base of observational and objective information to the parents and physician so they can make the best decision. School staff should avoid giving personal advice or opinions regarding medication because of potential liability.

19. What are the commonly prescribed medications for ADHD? How do they work?

The commonly prescribed medications for ADHD are psycho-stimulants, such as methylphenidate (Ritalin), dextroamphetamine (Dexedrine), and pemoline (Cylert), as well as antidepressants. It is thought that these medications work by stimulating the production of specific chemicals in the brain which are essential for normal focused attention, planning, and organization. The stimulant medications are relatively fast-acting, and any behavioral changes will be seen in a relatively short amount of time. A small percentage of children also require combinations of medications such as stimulants and antidepressants.

20. What should teachers do if they suspect side effects?

Suspected side effects must be reported immediately to the school nurse, parents, and physician. The physician can then determine if a dosage adjustment or change to another medication is necessary.

21. **How should medication be administered at school?**

Designated school staff must take responsibility for safely storing medication and monitoring the timely dispensation of prescribed doses. Individual districts are required to have their own policies and procedures. Some children with ADHD, who have difficulty remembering daily routines, may need to be reminded to take their medication.

School Programs and Services

22. **Do all children with ADHD also have specific learning disabilities or behavior problems in school? Do they all belong in "special" programs?**

No. Not all children with ADHD have learning disabilities or behavioral problems. However, there are some "overlaps" between these issues. Studies estimate that 60 to 80 percent of children with ADHD may have additional learning and/or behavioral problems. However, many of these needs can be accommodated successfully in the regular education classroom.

23. **Do all children with a clinical diagnosis of ADHD automatically qualify for special education or other remedial programs?**

No. A clinical diagnosis of ADHD does not automatically qualify a child for special education or remedial programs. In fact, it is generally recommended that interventions be implemented in the regular classroom before special programs are even considered. The student's Child Study Team must determine the adverse educational impact that requires specially designed instruction through an IEP as discussed in the following question. However, a student who has been diagnosed with ADHD is protected under Section 504 of the Rehabilitation Act of 1973. A 504 accommodation plan is not necessary for all students diagnosed with ADHD.

24. **How does a child with ADHD qualify for special education services?**

Qualifying for special education is a complex process of assessment and eligibility determination within specific disability categories. This includes a complete individual evaluation in accordance with the requirements of federal and state special education regulations and a determination by a Child Study Team that the child is eligible for and in need of specially designed instruction because of a disability. There is no separate category for qualifying a child as ADHD. A child with ADHD who has a measurable learning disability and meets eligibility criteria may qualify within the learning disability category. A child with a medical diagnosis of ADHD may qualify for special education within the category of health impairment if the multidisciplinary assessment team determines an adverse educational impact that requires specially designed instruction. **A medical diagnosis of ADHD is not in itself a guarantee of eligibility.** The school's multidisciplinary assessment team, working cooperatively with the parents, has both the responsibility and authority to determine if the ADHD is so serious that child's educational needs cannot be met in regular education with some accommodations. After this determination is made, the Child Study Team may identify the child as eligible for special education.

25. **Does the school have any special obligation to the child with ADHD who does not qualify for special education services?**

Yes. A Federal memorandum listed 1991, Clarification of Policy to Address the Needs of Children with ADHD within General and/or Special Education, takes the position that it is the responsibility of all educators to coordinate their efforts to provide services and adaptations to children in regular education who do not qualify for special education. This memorandum also emphasizes that some children with ADHD who do not qualify for special education may be entitled to other services or procedural safeguards through Section 504. (See Appendix B.)

26. **Are children with ADHD included under Section 504 of the Rehabilitation Act of 1973? What is the school district's obligation under Section 504?**

Yes. ADHD is a disability under Section 504. Even if a child with ADHD is found to be ineligible for special education services under IDEA, the requirements of Section 504 of the Rehabilitation Act of 1973 and its implementing regulations are applicable, if the student's ADHD substantially limits learning. In general, eligibility under Section 504 is a function of the severity of the child's disability condition, and children with ADHD may or may not fit within that definition. A child with a mild form of ADHD would probably not qualify for services through Section 504. The child whose learning is substantially limited by ADHD and who is not receiving meaningful educational benefit would be eligible for protection under Section 504. The district should prepare a written plan outlining the appropriate accommodations, related aids, and any other services necessary to enable the student to receive educational benefit.

27. **What can parents do if they disagree with school decisions or services?**

Ideally, parents, clinicians, and school districts will develop cooperative partnerships to meet the needs of children with ADHD in both regular and special education. However, when differences occur, parents do have numerous and specific procedural safeguards available, i.e., they may request an independent assessment or a hearing to challenge any actions regarding the identification, evaluation, placement, or services for their child if they cannot otherwise resolve their differences. Under Section 504 parents may file a grievance with the district Section 504 coordinator, file a complaint with the Office of Civil Rights, request a due process hearing, or go to court.

28. Does providing special accommodations in classwork, behavioral rewards, or homework modifications simply allow the child to avoid responsibility?

No. These children have an identified disability. Schools need to provide appropriate behavior programs, curriculum adaptations and reasonable accommodations to children with ADHD to help them be successful in school. For example, some children with ADHD have a difficult time remembering the details of homework assignments, and sending home a daily homework sheet for parental supervision would be a relatively simple response to this problem.

ADHD and the Future

29. What is in the future for children with ADHD, their families, and their schools?

Much of the ongoing research about ADHD in the private and public sectors holds real promise in terms of developing increasingly effective assessment and intervention strategies for children with ADHD. The federal and state governments and local school districts are increasingly committed to making this important information available to educators and to developing appropriate programs to improve the academic and social competence of these children. More effective early intervention, new assessment/ treatment techniques, staff development programs for educators, outcome studies about adults with ADHD, and caring partnerships of parents, support groups, professionals, and educators will all be part of this future.

APPENDIX H

Resource Directory

Contents

1. Choosing Materials
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Choosing Materials

Reading these lists of resources, educators and parents may wonder how they can tell which materials would best suit their needs. Douglas Carnine, director of the National Center to Improve the Tools of Educators (funded by the U.S. Department of Education's Office of Special Education Programs), suggests that schools and individuals follow a six-step process of evaluation. Before choosing a new book or program, potential purchasers should ask themselves:

1. Are the approach and its outcomes clearly defined?
2. Do instructional research findings indicate that the method is effective?
3. Is an accountability system for teaching and learning built into the method?
4. Is the method sustainable?
5. For which groups of students is the method equitable?
6. Are the costs of the method and its implementation reasonable?

The claims of publishers and other producers should be carefully examined and substantiated before implementing any new approach. Parents and teachers should not assume any one source is the final word. Instead, they should examine the information from several sources. The most reliable information will be the consensus among these different sources.

National Organizations

ADDult Support Network
2620 Ivy Place
Toledo, OH 43613
(419) 472-1286

American Federation of Teachers (AFT)
555 New Jersey Avenue, N.W.
Washington, D.C. 20001
(202) 879-4400

Association for Childhood Education
International (ACEI)
800 Roosevelt Road
Glen Ellyn, IL 60137
(800) 442-4453

Attention Deficit Information Network
(AD-IN)
475 Hillside Avenue
Needham, MA 02194
(617) 455-9895

Attention Deficit Disorder Association
(ADDA)
P.O. Box 972
Mentor, OH 44061
(800) 487-2282 Support Group Referral &
General Information line

For a list of support groups, send $4 to:
ADDA
19262 Jamboree Blvd.
Irvine, CA 92715

To join, send $25 to:
National ADDA
P.O. Box 488
West Newbury, MA 01985

Attention Deficit Resource Center
Suite 14
1344 East Cobb Drive
Marietta, GA 30068

Child with Attention Deficit Disorders
(CH.A.D.D.)
499 N.W. 70th Avenue, Suite 308
Plantation, FL 33317
(305) 587-3700

Membership $30
Professional Membership $60

Council of Administrators of Special
Education, Inc.
615 16th St., N.W.
Albuquerque, NM 87104
(505) 243-7622

Council for Exceptional Children (CEC)
1920 Association Drive
Reston, VA 22091
(703) 264-9474

Council for Learning Disabilities
P.O. Box 40303
Overland Park, KS 66204
(913) 492-8755

Federation of Families for Children's
Mental Health
1021 Prince St.
Alexandria, VA 22314
(703) 684-7710

Higher Education and Adult Training for People with Handicaps (HEATH)
National Clearinghouse on Post-secondary Education for Handicapped Individuals
One Dupont Circle, NW
Suite 800
Washington, D.C. 20036-1193
(800) 939-9320

Learning Disabilities Association of America (LDA)
4156 Library Road
Pittsburgh, PA 15234-1349
(412) 341-1515
(fax) (412) 344-0224

National Association of School Psychologists
8455 Colesville Road
Suite 1000
Silver Spring, MD 20910
(301) 608-0500

National Attention Deficit Disorder Association (NADDA)
42 Way to the River
West Newbury, MA 01985
1-800-487-2282
(508) 462-0495

National Center for Learning Disabilities (NCLD)
381 Park Avenue South, Suite 1420
New York, NY 10016
(212) 545-7510

National Education Association (NEA)
1201 16th St., NW
Washington, D.C. 20036
(202) 833-4000

National Information Center for Children and Youth with Disabilities (NICHCY)
P.O. Box 1492
Washington, D.C. 20013-1492
1-800-695-0285
(202) 884-8200

National Parent Network on Disabilities
16000 Prince Street, Suite 115
Alexandria, VA 22314
(703) 684-6763

Professional Group for ADD and Related Disorders (PGARD)
28 Fairview Road
Scarsdale, NY 10583
(914) 723-0118

Federally Sponsored ADHD Training Projects

ADDNET--A Network of Live Broadcasts Concerning ADD
University of Georgia
570 Aderhold Hall
Athens, GA 30602
(800) 296-4770
Project Directors: William N. Bender and
Phillip J. McLaughlin

PROJECT ADEPT: Attention Deficit Education for Professionals and Teachers
University of Arizona
College of Education
Tucson, AZ 85721
(602) 621-3248
Project Directors: Maria Nahmias and
Candace Bos

SEA/IHE Collaborative Inservice, Preservice and Mini-Team Personnel Preparation Project for Serving Students with ADD
Kansas State Board of Education
120 SE 10th Avenue
Topeka, KS 66612
(913) 296-3867
Project Director: Joan R. Miller
University of Kansas/UAP-Lawrence
1052 Dole
Lawrence, KS 66045
(913) 864-4950
Project Director: Jeannie Kleinhammer-Trammill

ADD Special Project to Develop an Inservice Training Curriculum
University of Massachusetts, Boston
100 Morrissey Boulevard
Boston, MA 02125-3393
(617) 287-7250
Project Director: Gary Siperstein

JAADD ADD Project for Inservice Educator Training and Parent/Child Training
Jewish Association for ADD
1416 Avenue M, Suite 202
Brooklyn, NY 11223
(718) 376-3079
Project Director: Ann Julian

Enhancing Knowledge and Skills of Personnel to Meet the Needs of Students with ADD
University of Miami
School of Education
P.O. Box 248065
Coral Gables, FL 33124-2040
(305) 284-3003
Project Directors: Marjorie Montague, Anne Hocutt,
and Don McKinney

Regional Consulting Center to Assist School Personnel Working with Adolescents with ADD
Lehigh University
Dept. of Counseling, School Psychology, and
Special Education
111 Research Drive
Bethlehem, PA 18015
(215) 758-3258
Project Directors: Edward Shapiro and
George DuPaul

General Sources of Information About ADHD

A.D.D. ADDA. Pamphlet briefly describes ADD, its effects, causes, diagnosis, and treatment. 2pp. ADDA

About Attention Deficit Disorder. Bete, Channing. Short booklet provides brief information about ADD. ($19.50) for 25 copies. ADD WareHouse

ADD/ADHD: What is It? ADDA. Simple explanation of ADD, its associated characteristics and the myths about ADD. 3pp. (free) ADDA

ADD and Children Who Are Gifted. ERIC Digest E522. Shows the similarities between ADD behavior and gifted behavior, and how to distinguish between the two. It includes information on what to do if a child with ADD is also gifted. 2pp. ($1) ERIC

The ADD Hyperactivity Workbook for Parents, Teachers, and Kids. Parker, Harvey. Describes ADD and treatment. Includes worksheets to help with behavioral management. 108pp. ($12.95) Impact Publications

ADHD. National Center for Learning Disabilities. Explains the characteristics of individuals with ADHD. Includes "Understanding Attention Deficit-Hyperactivity Disorder" by Larry Silver and "A Basic Discussion" by Simon Epstein, and the "The Confusion Relating to Ritalin" by Silver. 15pp. (free) NCLD

ADHD/Hyperactivity: A Consumer's Guide. Gordon, Michael. Explains principles that enable parents and teachers to understand and work with children with ADD. 178pp. ($16) GSI Publications

Adding Up the Facts on ADD. Office of Special Education Programs. This publication provides an introduction to ADD explaining its definition, characteristics, identification, causes, and treatments. It also outlines the role of the school and its legal obligations. 4 pp. ERIC

All about Attention Deficit Disorder. Phelan, Thomas. Brief manual on symptoms of ADD and methods of diagnosis and treatment. 45pp. ($14) ADD WareHouse

Assessment and Characteristics of Children with Attention Deficit Disorder. Dykman, Roscoe; Ackerman, Peggy; and Raney, Thomas. Arkansas Children's Hospital Research Center. This document synthesizes research on the definition, possible causes, and behavioral characteristics of ADD. It reviews different assessment methods and evaluates commonly used rating scales. 130pp. ERIC

Attention Deficit Disorder. ERIC Digest #E445. Short explanation of ADD and teaching directions. 2pp. ($1) ERIC

Attention Deficit Disorder: ADHD and ADD Syndromes. Jordan, Dale. Chapters include: Forms of Attention Deficit Disorder; How Attention Deficit Disorder Disrupts One's Life; How to Help Individuals Who Have ADHD; and Hope for the Future. 121pp. LDA

Attention Deficit Disorder: Beyond the Myths. Office of Special Education Programs. This publication rebuts ten commonly believed myths about ADD and explains the facts. 2pp. ERIC

Attention Deficit Disorder: A Different Perception. Hartmann, Thom. This book's perspective is that people with ADD are "Hunters in a Farmer's World." It describes ADD and analyzes why some children and adults with ADD are more successful than others. Provides practical advice and specific techniques. 160pp. ($9.95) The ADDed Line

Attention Deficit Disorder in Teenagers and Young Adults. Sloane, Mark; Assadi, Laurie; and Linn, Linda. This booklet describes the course of ADD in young adults. ($3.00) LDA

Attention Deficit Hyperactivity Disorders. Barkley, Russell. Comprehensive Analysis of the history of ADHD, its symptoms, theories of its nature, associated conditions, developmental course and outcome, and family context. The book emphasizes assessment and treatment. 747pp. ($50) Guilford Press

Attention Deficits: The Diverse Effects of Weak Control Systems in Childhood. Levine, Melvin. This reprint from Pediatric Annals explains the technical details and symptoms of ADD to doctors. It includes a sample inventory of symptoms and information on control systems, associated manifestations, complications, evaluation, and management. 9pp. ($3) LDA

Attention Deficit Disorder in Children and Adolescents. Fadely, Jack and Hosler, Virginia. Describes the course of the disorder in children and teenagers. 292pp. ($49.75) Charles Thomas

Briefing Paper: ADD. National Information Center. Answers common questions about ADD, its causes, the signs of ADD, self-esteem and special education. Explains behavior management, medication, and appropriate educational programs. Includes bibliography and list of organizations. 8pp. (free) National Information Center

Children with Attention Deficit Disorders: ADD Fact Sheet. CHADD. Briefly describes the characteristics, identification, and treatment of children with ADD. 2pp. (free) CHADD

Children with ADD: A Shared Responsibility. Based on a report by CEC's Task Force on ADD, this booklet goes into detail on the prevalence and characteristics of ADD, the evaluation process, the use of interventions, teacher assistance teams, multidisciplinary approaches and professional collaboration, communication between parents and professionals. It also tells how to create a positive school climate, work on school staff development, and help the child in the classroom. Includes focusing strategies. 35pp. ($8.90) CEC

Creative Approaches to ADHD: Myths and Reality. Hunter, Christine. This guide identifies and responds to 13 common myths about ADHD. It includes a list of additional resources. ($4) LDA

Defiant Children: A Clinician's Manual for Parent Training. Barkley, R.A. (1987). New York: Guilford.

Dr. Crook Discusses Hyperactivity and the Attention Deficit Disorder. Crook, William. Crook discusses ADHD and his controversial theory that it is caused by food allergies and yeast. 32pp. ($3.50) LDA

Executive Summaries of Research Syntheses and Promising Practices on the Education of Children with Attention Deficit Disorder. Office of Special Education Programs. This set of research summaries provides an overview of the research synthesis on ADD funded by the Division of Innovation and Development, Office of Special Education Programs, Office of Special Education and Rehabilitative Services, U.S. Department of Education at the five ADD Centers. 56pp. ERIC

Gifted But Learning Disabled: A Puzzling Paradox. ERIC Digest E479. This digest explains that since students' learning disabilities are separate from their intelligence, children can be both ADD and gifted. 2pp. ($1) ERIC

The Hyperactive Child Book. Kennedy, Terdal and Fusetti. Guide to treating, educating, and living with an ADHD child. ($19.95) St. Martin's Press

The Hyperactive Child, Adolescent, and Child: ADD Through the Lifespan. Wender, Paul. Information on causes of ADD, symptoms, differences between ADD and learning disabilities, evaluation methods, and treatment approaches. 162pp. ($12) Oxford Press

How to Own and Operate An Attention Deficit Kid. Maxey, Debra. Written by a parent of an ADD child, this booklet provides general information and ways to help the child with ADD. 43pp. ($10) CHADD

Issues in the Education of Children with ADD. McKinney, James; Hocutt, Anne; and Montague, Marjorie. *Exceptional Children* Special Issue Vol. 6 No. 2. Contains articles on ADD. 96pp. ($8.50) CEC

Learning Disabilities and Young Adults. American Academy of Pediatrics. This brochure describes the different types of learning disabilities and how to help young people cope with associated problems at school and work. 5pp. (free with SASE, 100 for $27.50) American Academy of Pediatrics

A New Look at Attention Deficit Disorder. Nichamim, Samuel J. and Windell, James. This booklet outlines how ADD is treatable. It includes information on the symptoms and signs of ADD. ($3.25) LDA

Stress Management for the Learning Disabled. ERIC Digest #E452. Short explanation of achievement stress and how it affects children with learning problems. 2pp. ($1) ERIC

Succeeding Against the Odds: How the Learning Disabled Can Realize Their Promise. Smith, Sally. A guide for helping people with LD and ADD achieve. It includes useful strategies, guidance, and inspiration. 304pp. ($13) ADD WareHouse

A Synthesis of Research Literature on the Assessment and Identification of Attention Deficit Disorder. McKinney, James; Montague, Marjorie; and Hocutt, Anne. University of Miami Center for Synthesis of Research on Attention Deficit Disorder. This document is a synthesis of research related to the assessment and identification of children with ADD. It describes the characteristics of children with ADD, their co-occurring disabilities, and multicultural characteristics. 200pp. ERIC

Who, What, Where, and When: A Calendar of Conferences and Speakers on Attention Deficit Disorder. Office of Special Education Programs. This calendar lists events and speakers on ADD, ranging from speakers at local support groups to national conferences focusing on ADD. 12pp. ERIC

Why Johnny Can't Concentrate: Coping with Attention Deficit Problems. Moss, R. and Dunlap, H. Explains the problems of children with ADHD for the general reader. ($10) LDA

Resources for Parents

ADD: What Parents Need to Know. Office of Special Education Programs. This publication explains ADD to parents to help them determine if their child shows signs of having ADD. It is a step-by-step guide to identification, the role of the school, the laws pertaining to ADD, and medication. It also describes some simple strategies to help parents with their child's behavior at home. 4pp. ERIC

ADHD and Learning Disabilities: Booklet for Parents. Silver, Larry. This booklet provides a general overview of ADHD and learning disabilities, including the various types of disabilities, effects of ADD, emotional and social problems. Includes information on how parents can help. 16pp. ($2) LDA

Attention Deficit Hyperactivity Disorder: Questions and Answers for Parents. Greenberg, Gregory S. And Horn, Wade F. Answers frequently asked questions about ADD. Includes behavior management and cognitive therapy techniques. 134pp. ($11.95) Research Press

Attention Deficit Disorders, Hyperactivity and Associated Disorders - A Handbook for Parents and Professionals. Coleman, Wendy. This book describes ADD & ADHD and includes information for parents and teachers. Calliope Books

Attention Deficit-Hyperactivity Disorder: A Guide for Parents. LDA. Pamphlet provides a brief overview of ADD and its treatment. 2pp. (free) LDA

Attention, Please! Copeland, Edna, and Love, Valeria. Written by parent professionals, this guide for successfully parenting children with ADD emphasizes real-life experiences and proven solutions. 352pp. ($20) Resurgens Press

Coping with the Hyperactive. Cina, Kathleen. Describes hyperactive (ADHD) behavior and provides some suggestions for parents of young children. 5pp. ($1) LDA

Correcting Without Criticizing: The Encouraging Way to Talk to Children About Their Misbehavior. Taylor, John. This booklet addresses often-overlooked ways adults can become more effective in confronting children about misbehavior. 34pp. ($4.50) Sun Media

Creative Answers to Misbehavior: Getting Out of the Ignore-Nag-Yell-Punish Cycle. Taylor, John. This booklet contains 29 categories of responses to misbehavior. 32pp. Sun Media

Dr. Larry Silver's Advice to Parents on ADHD. Silver, Larry. Answers common questions about ADHD and explains the methods of treatment. It focuses on what parents can do to help their child. 240pp. ($17.95) American Psychiatric Press

Guidelines for Living with Hyperactive Children. Ente, Gerald. A list of 12 simple things parents can do. 2pp. ($.50) LDA

Helping Your Hyperactive Child. Taylor, John. Includes information on a multi-modular approach including nutritional, educational, psychological, and medical techniques. 466 pp. ($20) LDA

Homework Without Tears. Canter, L. And Hausner, L. (1987). New York: Harper & Row

House Rules about Homework. ADDA. List of suggestions of ways for parents to make sure that homework is done. 1pp. (free) ADDA

Hyperactivity: Why Won't My Child Pay Attention. Goldstein, Sam and Michael. Explains ADHD, reviews the treatments and provides guidelines. Helps parents work with their children. 240pp. ($20) ADD WareHouse

Hyperkinesis. Centerwall, Siegried & Willard. Explains what hyperkinesis means and what causes hyperactive behavior. Also covers how to treat hyperactivity and how it affects children's future. ($2.50) LDA

If Your Child is Hyperactive, Impulsive, Distractible... Garber, Stephen and Marianne, Spizman, Robyn. Practical program for changing the behavior of ADD children from diagnosis to a step-by-step program to improve the child's attention span. 235pp. ($20) ADD WareHouse

Keys to Parenting a Child with ADD. McNamara, Barry and Francine. Guide to working with a child's school, managing the child's behavior and acting as an advocate. 165pp. ($5.95) Barron's Educational Series

Learning Disabilities and Children: What Parents Need to Know. American Academy of Pediatrics. Alerts parents to the early signs of learning disabilities. Describes the causes of the problem and emphasizes the need for early detection and proper treatment. 5pp. (free with SASE, 100 for $27.50) American Academy of Pediatrics

Learning to Parent the Hyperactive Child. Hafner, Claire. This book contains entries from a journal kept by a nurse and mother of a hyperactive son. The book provides a personal perspective on hyperactivity and how to control it. ($8.95) LDA

Maybe You Know My Kid: A Parent's Guide to Identifying, Understanding & Helping Your Child with ADD. Fowler, Mary. The story of the author's son who has ADD and the effects his ADD has had on the family. It tells how to help children with ADD and how to become an activist for their education. ($14) Birch Lane Press

The Misunderstood Child. Silver, Larry. Includes a general overview of learning disabilities and positive treatment strategies. 322pp. ($10) McGraw-Hill

Negotiating the Special Education Maze. Anderson, Chitwood, and Hayden. Contains information about programs and legislation. Shows how to find the best program. 250pp. ($15) ADD WareHouse

New Skills for Frazzled Parents. Amen, Daniel. Workbook and 8 cassettes help teach parents to establish rules and manage misbehavior. Helps in thinking clearly and logically in dealing with a difficult child. Taped live from an actual parenting class. ($104.50) Center for Effective Living

A Parent's Guide: Attention Deficit Hyperactivity Disorder in Children. Goldstein, Sam and Michael. Basic information on ADD for parents and health professionals. 24pp. ($28 for ten) ADD WareHouse

A Parent's Guide to Attention Deficit Disorders. Blain, L. Helps parents to understand their child with ADD and to find the appropriate treatment and support for the disorder. It includes sections on causes, diagnosis, treatment, therapy, and living with ADD. ($10) LDA

The Parents' Hyperactivity Handbook: Helping the Fidgety Child. Paltin, David. This book explains the symptoms of ADHD and its possible link to minimal brain dysfunction or genetic disorders. 300pp. ($27.50) Insight Books

Parent Packet. AD-IN. This package contains many different articles and information sheets. It includes technical articles on ADD as well as lists of resources, strategies, and legal rights. ($15) AD-IN

Parenting Attention Deficit Disordered Teens. Landi, Patricia. Booklet describes how the normal problems of adolescents are radically altered by ADD. ($3.95) LDA

Solving the Puzzle of Your Hard-to-Raise Child. Crook, William. This book claims that much unsatisfactory behavior results from improper or inadequate nutrition and advises parents how to improve their children's behavior by improving their diet. ($17.95) LDA

Something's Wrong with My Child! Wallace, Harriet. Subtitled: A Straightforward presentation to help professionals and parents to better understand themselves in dealing with the emotionally-charged subject of disabled children. 210pp. ($35.75) Charles Thomas

Sometimes I Get All Scribbly: Living with ADHD. Neuville, Maureen. The mother of an ADHD child portrays what life with ADD is like for that child and family. 116pp. ($9.95) Sun Media

Your Hyperactive Child: A Parent's Guide to Coping with ADD. Ingersoll, Barbara. Includes a general overview of ADHD, diagnosis, causes, treatment, daily life, special problems, school, and behavior modification. 219pp. ($10) ADD WareHouse

Resources for Children with ADHD

The Don't Give Up Kid. Gehret, Jeanne. Illustrated. Story of a child with learning disabilities who gains an understanding of his problem. ($8.95) Sun Media

Eagle Eyes. Gehret, Jeanne. Story of a child who uses nature to understand and work on his ADD. 40pp. ($10) Verbal Images

Fighting Invisible Tigers: A Stress Management Guide for Teens. Hipp, Earl. This book presents easy-to-understand guidelines for assertion, friendship skills, relaxation methods, etc., for adolescents. 120pp. ($10) Sun Media

High School Help for ADD Teens. Chesapeake. This booklet contains academic strategies and tips for students with ADD. 30 pp. ($7.95) Chesapeake Psychological Services

I Would If I Could: A Teenager's Guide to ADHD/Hyperactivity. Gordon, Michael. This book helps teenagers understand ADD and its effects. ($12) GSI

I'm Somebody Too. Gehret, Jeanne. A book length story that explains ADD to siblings of children with ADD and shows how one girl handles her feelings when her parents give more attention to her brother with ADHD. 170pp. ($12) Verbal Images Press

Jumpin' Johnny Get Back to Work!: A Child's Guide to ADHD/Hyperactivity. Gordon, Michael. This is the story of impulsive Johnny and how his family and school work with him to make life easier. 30pp. ($11) GSI Publications

Keeping Ahead in School: A Student's Book About Learning Disabilities and Learning Disorders. Levine, Mel. Explains how people learn and the causes of learning problems. Shows how to understand their strengths and weaknesses. Ages 9-15. 297pp. ($27) Educator's Publishing Service

Learning to Slow Down and Pay Attention. Nadeau, Kathleen and Dixon, Ellen. Illustrated. Explains to children how to identify ADD related problems and how their parents, teachers, and doctor can help. Ages 6-14. ($11) LDA

Making the Grade: An Adolescent's Struggle with ADD. Parker, Roberta. This is the story of a seventh grader's life with ADD. Includes a section on commonly asked questions and answers about ADD. For ages 9-14. 47pp. ($10) Impact Publications

My Brother's A World-Class Pain. Gordon, Michael. Story of an older sister's efforts to understand and live with a brother with ADHD. ($11) GSI

Otto Learns About His Medication. Galvin, Matthew. Illustrated. Fidgety car visits mechanic who gives him special medicine. Ages 5-10. ($8.00) Magination Press

Putting On the Brakes. Quinn, Patricia and Stern, Judith. This book explains the problems of students with ADD. Includes techniques and coping strategies. For ages 8-12. 64pp. ($9) Brunner/Mazel

"Putting on the Brakes" Activity Book for Young People with ADHD. Quinn, Patricia and Stern, Judith. This companion book uses pictures, puzzles, and mazes to teach problem solving, organizing, setting priorities, planning, and maintaining control. 88pp. ($14.95) Brunner/Mazel Publishers

School Survival Guide for Kids with Learning Differences. Cummings, Rhoda, and Fisher, Gary. This book is designed to help school adjustment and study skills. It includes sections with advice for specific subjects and tips on social skills. 172pp. ($10.95) Sun Media

Shelly the Hyperactive Turtle. Moss, Deborah. Illustrated. Hyperactive turtle learns what "hyperactive" means and is given special medicine. For ages 3-7. 24pp. ($12.95) Woodbine House

Slam Dunk: A Young Boy's Struggle with ADD. Parker, Roberta. This is the story of an inner city fifth grader and his problems caused by ADD. It shows how behavioral, medical, and classroom interventions can help him. It includes a section with questions and answers about ADD. Ages 8-12. ($10) ADD WareHouse

The Survival Guide for Kids with Learning Differences. Cummings, Rhoda, and Fisher, Gary. This book explains some problems of children with learning problems and how to handle the problems and the feelings that come with them. 98pp. ($9.35) Sun Media

Trouble with School. Dunn, Kathryn and Allison. This picture book, written by a mother/daughter team from their own experience, follows a young girl from discovering problems in the first grade to developing a treatment plan. Illustrated. For ages 6-10. ($10) ADD WareHouse

The Young Person's Guide to Understanding ADHD. This book explains ADD to children from 7-14 and gives advice on how to become better organized. ($8.95) Magination Press

Resources for Adults with ADHD

ADD in Adults. Epstein, Samuel. Describes ADD in adults, the diagnosis, and the effects of drugs. 2pp. (free) LDA

ADD Adult Packet. AD-IN. This packet contains many different articles and information sheets. The articles range from technical information about ADD to practical strategies on living with one's ADD. Includes information about college. ($10) AD-IN

The Adult with ADD. CHADD Special Edition. Contains six articles on adults with ADD. Includes "Paying Attention to Attention in Adults," "Adult Attention Deficit Hyperactivity Disorder, Residual State," "Coping Strategies for ADHD Adults," "The Emotional Experiences of ADD," "Coming Out of the Closet...Confessions of an ADD? Mother," and "ADD Adult Strategies." 15pp. (free) CHADD

Attention Deficit Disorder in Adults. Weiss, Lynn. Explains what ADD is, how it manifests itself in adults, and what can be done to cope with it. 217pp. ($13) LDA

The Gift of ADD. Allen, Richard. A Psychologist's autobiography of his personal victory over his ADD and Learning Disabilities. 14pp. ($4.95) Attention Deficit Resource Center

Hyperactive Children Grown Up. Weiss, Gabrielle and Hechtman, Lily. Based on a McGill University study following children with ADD as they grew up. Describes treatments and changes in these young adults. 473pp. ($10.95) Guilford Press

Inside ADD. Alfultis, Susan. The autobiography and journal of a woman with ADD. Includes techniques she has used to compensate for her disability. ($16) ADDult Support Network

Problems of Attention Deficit Disorder in Adults. Landi, Patricia. Includes information about the problems of adults with ADD including job problems, psychological problems, and relationship problems. ($3.95) LDA

You Mean I'm Not Lazy, Stupid, or Crazy. Kelly, Kate and Ramundo, Peggy. Written by ADD adults for ADD adults, the book provides information on identifying, understanding, and managing the dynamics of ADD in Adults. Includes practical "how-to's" and moral support. 448pp. ($19.95) Tyrell & Jerem Press

Resources for Educators

The ADA/Section 504 Accommodation Individual Plan Writer Software. McKethan, James, Edwards, James, and Malone, Timothy. (1996). Professionally developed, this software package is designed to aid the school services committee in writing accommodation plans as required under Section 504 of the Rehabilitation Act and the Americans with Disabilities Act. Site licenses are available--call 1-800-341-7874, ext. 275. Product #30005, $149, plus $7.50 shipping/handling. (For those who purchased Section 504, the ADA and the Schools, Product #300056DISC. $99, plus $10 shipping/handling).

Attention Deficit Disorders: A Guide for Teachers. CHADD. Defines ADD and gives specific recommendations for teaching students with ADD. 6pp. (free) CHADD

ADD Hyperactivity Handbook for Schools. Parker, Harvey. Explains current education policies and their effects on children with ADD. Includes methods of evaluation and helping to teach children with ADD and sample IEPs. 330pp. ($25) Impact Publications

The Attention Deficit Hyperactive Child in the Classroom: Strategies for the Regular Classroom Teacher. Martin, Lucy. Suggested practical interventions for teachers to use when working with ADHD children. 20pp. ($2.08) Chesapeake Psychological Services

Attention Deficit Hyperactivity Disorders in Children: Clinical and Treatment Issues. Teeter, Phyllis, ed. This special issue of the School Psychology Review features articles on ADD, its basis, criticism, and assessment. It also includes the effects of medication, behavioral interventions and training models. ($12.50) NASP

Attention Deficit Hyperactivity Disorder (ADHD) Teacher Handout. Waddell, Debby. Describes ADHD and what teachers can do to help students. It has suggestions for elementary and secondary students. 3pp. (free) NASP

The Attention Deficit/Hyperactive Student at School: A Survival Guide. Taylor, John. This booklet is a quick reference for teachers that explains ADD and how teachers can help. 48pp. ($10.95) Sun Media

ADD: Help for the Classroom Teacher. Buchoff, Rita. Explains how teachers can identify ADD and how to help manage a child with ADD in the classroom. Gives specific suggestions on organization, directions, classroom management, and self-esteem as well as how to establish a cooperative parent-teacher relationship. 5pp. ($2.75) Association for Childhood Education International

ADHD and Learning Disabilities: Booklet for the Classroom Teacher. Silver, Larry. This booklet provides a general overview of ADHD and LD including the various types of disabilities, effects of ADD, emotional and social problems. Includes information on how teachers can help. 16pp. ($2) LDA

The Attention Deficit Disorder Intervention Manual. McCarney. This book contains ways schools can help children with ADD focus and learn. Hawthorne Educational Services

Attention without Tension. Copeland, Edna and Love, Valerie. A handbook on ADD for teachers including ADD characteristics, causes, treatments, and classroom management strategies. It also contains 80 pages of reproducible masters. 180pp. ($22) Resurgens Press

Behavior Change in the Classroom: Self-management Interventions. Shapiro, E.S. and Cole, C.L. (1994). New York: Guilford Press.

Beyond Maladies and Remedies. Riegel, Hunt. Based on suggestions from 900 teachers, this book demonstrates ways to adapt instructional methods or materials to children with special needs. 127pp. ($37) ADD WareHouse

CH.A.D.D. Educators Manual. Fowler, Mary. This book, written by several leaders in the ADD field, explains ADD and the best ways to educate students with ADD to teachers, school administrators, and others in education. Sections include: "The Disability Named ADD," "ADD Goes to School," "Factors that Compromise Learning," "Identification and Assessment," "Interventions: Principles and Practices," "Behavioral Interventions," "Parents and Schools Working Together," and "ADD: A Brief Legal Summary." 84pp. ($10) CHADD

Children with Exceptional Needs in Regular Classrooms. Cohen, Libby G., Editor. This book presents emerging trends and preferred practices for teaching exceptional students in regular classrooms, as well as the legal requirements governing their education. 184pp. ($11.95) NEA

Complete Learning Disabilities Handbook. Hartwell, Joan. This book outlines a referral and identification process, intervention strategies, classroom management, and ways to help with weak areas. Its emphasis is on suggestions and ready-to-use materials. 206pp. ($30) ADD WareHouse

Difficulties that Children with ADHD May Have in School. Lists some of the problems children with ADD have in school. 1pp. (free) ADDA

Diverse Teaching for Diverse Learning. Copeland, Edna and Walker, Ronald. This book presents a model for effectively teaching at-risk students in regular education including classroom strategies and medical management of EDD. ($24) Resurgens Press

Educators' Packet. AD-IN. This package contains many different articles and information sheets. It includes technical articles on ADD as well as lists of resources, classroom strategies, and legal rights of children with ADD. ($10) AD-IN

Exceptional Children, Special Issue: Issues in the Education of Children with Attention Deficit Disorder. 60:2 October/November, 1992.

Home-school Collaboration: Enhancing Children's Academic and Social Competence. Christenson, S.L. and Conoley, J.C. (1992). Silver Spring, MD: National Association of School Psychologists.

Homework Without Tears. Canter L. and Hausner, L. (1987). New York: Harper & Row

The Hyperactive Child. Black, Bob. Describes the hyperactive child and how to understand him. 2pp. ($.50) LDA

How to Reach and Teach ADD/ADHD Children. Rief, Sandra. This book focuses on practical techniques, strategies and interventions for helping children with attention problems and hyperactivity. 245pp. ($27.95) CEC

Position Statement: Students with Attention Deficits. National Association of School Psychologists. The official policy of NASP regarding ADD. It lists effective interventions and recommendations for medication. 2pp. (free) NASP

The Prepare Curriculum. Goldstein, Arnold. Contains ten course length interventions on Problem solving, interpersonal skills, situational perception, anger control, moral reasoning, stress management, empathy, recruiting supportive models, cooperation, and understanding and using groups. 700pp. ($40) ADD WareHouse

A Primer on Attention Deficit Disorder. Fouse, Beth and Brians, Suzanne. The authors define this often elusive condition and describe its characteristics at different age levels. They then offer a variety of behavior modification strategies for coping with ADD. 40pp. ($1.25) Phi Delta Kappa

Promising Practices in Identifying and Educating Children with Attention Deficit Disorder. Burcham, Barbara and Carlson, Laurance. University of Kentucky's Federal Resource Center. This document describes assessment and intervention policies and practices used by schools. It includes in-depth studies of nine schools. 180pp. ERIC

Providing an Appropriate Education to Children with ADD. ERIC Digest E462. Briefly describes the school responsibilities and federal laws affecting children with ADD. 2pp. ($1) ERIC

Research Synthesis on Education Interventions for Students with Attention Deficit Disorder. Fiore, Thomas; Becker, Elizabeth; and Nero, Rebecca. Research Triangle Institute Attention Deficit Disorder Intervention Center. This document is a synthesis of research on behavioral and educational interventions for children with ADD. The report evaluates several strategies and educational techniques for educating children with ADD. 117pp. ERIC

School-Based Assessments and Interventions for ADD Students. Swanson, James. Based on a model school program at the University of California, this book includes information on behavior modification, social skill training and cognitive therapy. ($22) ADD WareHouse

School-home Notes: Promoting Children's Classroom Success. Kelley, M.L. (1990). New York: Guilford Press

Students with Special Needs: Resource Guide for Teachers. Shinsky, F. John. Practical descriptions, instructional and behavioral strategies for working with students with disabilities. Contains information on several disability areas including ADHD. ($9.95) Michigan

A Teacher's Guide: Attention Deficit Hyperactivity Disorder in Children. Goldstein, Sam and Michael. This booklet briefly describes ADHD, the problems it causes in the classroom, and practical behavioral interventions. 24pp. ($28 for ten) ADD WareHouse

Teacher Training Program. Dwyer, Kevin. This computer disk contains all the materials from the National Association of School Psychologists teacher training course on ADD. (at-cost, call) NASP

Teaching Children with ADD. ERIC Digest #462. Defines the two forms of ADD and includes tips on establishing the proper learning environment, giving instructions to students with ADD, giving assignments, and enhancing self-esteem. 2pp ($1) ERIC

Teaching Self-management Strategies to Adolescents. Young, K.R., West, R.P., Smith, D.J., and Morgan, D.P. (1994). Longmont, CO: Sopris West.

Teaching Strategies. Office of Special Education Programs. This publication helps teachers by describing several schools' methods of teaching children with Attention Deficit Disorder. It includes ways to modify existing lessons and ways to plan new strategies to meet the special needs of children with ADD. ERIC

Teaching Students with ADD: A Slide Program for In-service Teacher Training. Parker, Harvey and Gordon, Michael. Provides an overview of ADHD and practical help in working with students and parents. It includes handouts and presenter's manual. 42 slides. ($150) ADD WareHouse

Techniques for Including Students with Disabilities. Shinsky, F. John. A "step by step" guide with organizational, instructional, and behavioral strategies. Contains reproducible charts and 17 building checklists. 425pp. ($59.95) Michigan

Tough to Reach, Tough To Teach: Students with Behavior Problems. Rockwell, Sylvia. Describes children with behavior problems and suggests ways of gaining their cooperation in their own learning. 106pp. ($20) CEC

Thinking Smarter. Crutsinger, Carla. This book contains 127 lessons designed to teach students how to assimilate, process and retain information. Includes Teacher Manual and Student Black Line Masters. ($44) ADD WareHouse

Why Can't They Pay Attention? ADD: What Teachers Need to Know. Office of Special Education Programs. This publication explains ADD to teachers and describes how they can identify children with ADD. It lists some simple strategies teachers can use to help students focus more in class, and describes some programs adopted by successful schools. 4pp. ERIC

Legal Rights of Children with ADHD

The ADA/Section 504 Accommodation Individual Plan Writer Software. McKethan, James, Edwards, James, and Malone, Timothy. (1996). Professionally developed, this software package is designed to aid the school services committee in writing accommodation plans as required under Section 504 of the Rehabilitation Act and the Americans with Disabilities Act. Site licenses are available--call 1-800-341-7874, ext. 275. Product #300056. $149, plus $7.50 shipping/handling. (For those who purchased Section 504, the ADA and the Schools, Product #300056DISC. $99, plus $10 shipping/handling).

ADD/ADHD: Education and Parents' Rights. ADDA. Lists the rights of parents in their child's education. Includes information about IEPs and suggestions for communicating with the school. 3pp. (free) ADDA

Attention Deficit Disorder and the Law. Latham, Peter and Patricia. Addresses the rights of ADD under federal and state law. Includes protection under the Constitution, court decisions, Rehabilitation Act of 1973, the Individuals with Disabilities Education Act and the Americans with Disabilities Act. ($25) JKL Communications

Clarification of Policy to Address the Needs of Children with ADD. U.S. Department of Education. This is the official position of the Education Department on A.D.D. It outlines what schools are required to do for students with ADD. 4pp. (free) NICHCY

Getting Parents Involved in the Exceptional Education Process. Messina, James and Constance. This handbook guides parents through the special education procedures under Public Law 94-142. It includes a glossary and key court cases. 148pp. ($11.95) Sun Media

Guide to Section 504: How It Applies to Students with Learning Disabilities and ADHD. LDA. This guide explains the section of the Rehabilitation Act of 1973 which applies to persons with disabilities. Explains the definition of "Handicap," the types of discrimination prohibited and what school districts are required to provide. 2pp. (free) LDA

How to Participate Effectively in the IEP Process. LDA. Explains the Individual Education Plan that schools must develop for children with special needs. Outlines how to participate in the IEP meeting, what the IEP should contain and what to do if parents disagree with the plan. 2pp. (free) LDA

Providing an Appropriate Education to Children with ADD. ERIC Digest E462. Briefly describes the school responsibilities and federal laws affecting children with ADD. 2pp. ($1) ERIC

When Your Child Needs Testing: What Parents, Teachers, and other Helpers Need to Know About Psychological Counseling. Shore, Milton; Brice, Patrick; and Love, Barbara. This book explains about the purpose and method of psychological testing and what to do if parents disagree with the results. 192pp. ($20) ADD WareHouse

You, Your Child, and Special Education: A Guide to Making the System Work. Cutler, Barbara. This book shows parents how to maneuver the special education system. It explains the rights of children, how to develop a partnership with teachers and administrators, and how to make the IEP process work. 249pp. ($22) ADD WareHouse

Medication and Other Treatments

1-2-3: Magic: Training Your Preschooler and Preteen to Do What You Want Them To Do. Phelan, Thomas. Discipline program with specific instructions. 57pp. ($14) Child Management

ADD/ADHD: Medical Treatment. ADDA. Simple explanation about medication written for parents. Includes information about side effects. 3pp. (free) ADDA

The Attending Physician: ADD. Copps, Stephen. This guide for pediatricians who treat ADD explains the tools necessary to identify and treat patients with ADD. 180pp. ($26) Resurgens Press

Attention Deficit-Hyperactivity Disorder: A Clinical Guide to Diagnosis and Treatment. Silver, Larry. A guide for medical professionals. ($23.50) American Psychiatric Press

Attention Deficit Hyperactivity Disorder: A Clinical Workbook. Barkley, R.A. (1991). New York: Guilford Press

Attention Deficit Hyperactivity Disorder: A Handbook for Diagnosis and Treatment. Barkley, R.A. (Ed.). (1990). New York: Guilford Press

Attention Deficit Disorders and Hyperactivity in Children. Accardo, Blondis and Whitman, eds. This anthology emphasizes diagnosis and treatment from a medical point of view. 424pp. ($45) ADD WareHouse

Attention Deficit Disorder and Learning Disabilities: Realities, Myths, and Controversial Treatments. Ingersoll, Barbara and Goldstein, Sam. Two experts present a guide to help parents and professionals recognize the symptoms of ADD and evaluate the various treatments. Includes information on scientifically validated and controversial interventions. 240pp. ($13) ADD WareHouse

Choosing a Doctor for Your Child with Learning Disabilities or Attention Deficit Disorders. Ripley & Cvach. Advice for selecting a doctor. Learning Disabilities Project

Cognitive-Behavioral Therapy with ADHD Children: Child, Family and School Interventions. Braswell, Lauren and Bloomquist, Michael. A model for treating ADD integrating cognitive behavioral techniques and the home/school environment. 391pp. ($40) Guilford

Controversial Treatments for Children with ADHD. Goldstein, Sam and Ingersoll, Barbara. This article shows the lack of evidence for and the faults in the claims of several controversial "treatments" (controlled diet, megavitamins, anti-motion sickness medication, Candida yeast, EEG Biofeedback, Applied Kinesiology, and optometric vision training.) 4pp. (free) CHADD

Defiant Children: A Clinician's Manual for Parent Training. Barkley, Russell. Outlines a specific training program to teach parents of children with ADD. It focuses on ways parents can use behavioral management. 195pp. ($28) Guilford

Diagnosing Learning Disorders. Pennington, Bruce. Includes information on diagnosing and treating ADHD (and several other disorders). 224pp. ($25) ADD WareHouse

The Effects of Stimulant Medication on Children with Attention Deficit Disorder: A Review of Reviews. Swanson, James. University of California at Irvine ADD Center. This document synthesizes research from many different studies about the effects of stimulant medication. 74pp. ERIC

Goal Card Program. Parker, Harvey. Program for school or home to provide structure and positive reinforcement. ($14.95) ADD WareHouse

How to Cure Hyperactivity: A Blueprint Involving Nutrition. Wild, C. The author suggests an eight point plan to turn hyperactivity into productive activity. It includes information on body chemistry and how to use effort effectively. ($11.95) LDA

Independent Strategies for Efficient Study. Rooney, Karen. Program of educational intervention including strategies for time management, reading, testing and note taking. 102pp. ($28) ADD WareHouse

Listen, Look, and Think: A Self-Regulation Program for Children. Parker, Harvey. Contains a looped tape cassette that beeps at a variable interval to remind the child to pay attention. ($19.95) ADD WareHouse

Management of Children and Adolescents with Attention Deficit Hyperactivity Disorder. Friedman, Ronald and Doyal, Guy. Discusses ADD and hyperactivity. Gives practical applied guidance for managing and teaching children with ADD. ($24) LDA

Managing Attention Disorders in Children: A Guide for Practitioners. Goldstein, Sam and Michael. Contains technical information about ADD and an interdisciplinary approach to treatment incorporating drugs and behavior modification. Includes a section on training parents. 449pp. ($52.50) ADD WareHouse

Medical Management of Children with ADD. Parker, Harvey and Storm, George. Answers medical questions about ADD including extensive explanations about medication and their effects. 4pp. (free) CHADD

Medications for Attention Disorders (ADHD/ADD) and Related Medical Problems. Copeland, Edna. Describes the neurophysiological basis of ADHD and the effect of medication. Includes advice on how to choose the right medication. 420pp. ($35) Resurgens Press Inc.

The Overactive Child. Eisenberg, Leon. Reprint of *Hospital Practice* article describing hyperkinetic children (now called ADHD) and what physicians can do. Includes information on working with teachers, suggestions for parents, and information about drugs. 8pp. ($1) LDA

Parents are Teachers. Becker, Wesley. A child management program stressing the use of clear instructions. 200pp. ($16) ADD WareHouse

Ritalin: Theory and Patient Management. Greenhill, Laurence and Osman, Betty. This book is for physicians and health care professionals and contains technical information about the drug Ritalin. 320pp. ($95) ADD WareHouse

SOS: Help for Parents. Clark, Lynn. Helps parents learn skills for child management. 246pp. ($10) Parents Press

The Good Kid Book: How to Solve the 16 Most Common Behavior Problems. Sloane, Howard. Each chapter presents a common problem (homework, interrupting, cleaning one's room) and a step-by-step behavior guide to solve it. 350pp. ($20) ADD WareHouse

"Therapeutic Effects of Medication on ADHD: Implications for School Psychologists." DePaul, G.J., Barkley, R.A., and McMurray, M.B. (1991). *School Psychology Review*, 20, 203-219.

There *Are* Better Ways to Help These Children. Crook, William. Crook explains his controversial theory that diet and yeast causes everything from hyperactivity and attention deficits to school failure and juvenile delinquency. 32pp. ($5.50) LDA

Magazines and Newsletters

ADHD Report. Bi-monthly. ($65) Guilford

The ADDed Line. Bi-monthly. ($69) ADDed Line

ADDendum. Quarterly ($12.00) Chesapeake Psychological Services

ADDvisor. Bi-monthly. ($36) Attention Deficit Resource Center

ADDult News: An Adult Newsletter. Quarterly ($8.00) ADDult Support Network

Attention Please. Bi-monthly. Attention Please

CHADDer Box. Bi-monthly. (Included with membership) CHADD

CHADDer. Semi-annually (Included with membership) CHADD

Challenge. Bi-monthly. ($20) ADDA

Exceptional Child Education Resources. Quarterly. ($60) CEC

Exceptional Children. Bi-monthly. (Included with membership) CEC

Inclusion Times. Quarterly. ($29.95) National Professional Resources, Inc.

LDA Newsbriefs. Bi-monthly. ($13.50) LDA

Learning Disabilities. Semi-annually ($25) LDA

Strategies for Success. ($19) Strategies

Teaching Exceptional Children. Quarterly. (Included with membership) CEC

Videos

1-2-3 Magic: Training Your Preschooler and Preteen to Do What You Want Them To Do. Phelan, Thomas. Discipline program with specific instructions on how to manage behaviors. Includes book. ($40) Child Management

The ABC's of ADD. Quinn, Patricia; Lavenstein, Bennett; and Latham, Peter and Patricia. This video covers medical, legal, and personal strategies from childhood to adulthood.:30 ($29) JKL Communications

Academic and School-Related Problems of Students with ADHD and ADD. Copeland, Edna and Walker, Ronald. This video is part of the Diverse Teaching for Diverse Learning Series. It addresses the difficulties of students with ADD. Includes participant's guide.:45 ($35) Resurgens Press

ADD Adults Panel. Harrison, Walter, et.al. Panel discussion at AD-IN's Third National Conference on ADD. 1:00 ($30) AD-IN

ADD Adult Workshop: The Thrill of It All. Hallowell, Edward, and Raney, John. From AD-In's Fourth National Conference on ADD. 1:00 ($30) AD-IN

ADD Adult Workshop: Why Can't You Listen? Problems in Couples and Relationships. Hallowell, Edward and Raney, John. From AD-In's Fourth National Conference on ADD. 1:00 ($30) AD-IN

ADD For Beginners: A Primer for Medications. Bass, Jonathan. Information on Medication from AD-IN's Fourth National Conference on ADD. 1:00 ($30) AD-IN

The ADD Child in the Classroom: Additional Techniques to Improve Behavior. Lavole, Richard. More classroom strategies. 1:00 ($30) AD-IN

The ADD Child in the Classroom: Specific Techniques to Improve Behavior. Lavole, Richard. Classroom strategies from AD-IN's Second National Conference on ADD. 1:00 ($30) AD-IN

ADD Goes to College Panel. Cavanaugh, Faigel, Goldberg, and Muncaster. Panel discussion from AD-IN's Fourth National Conference on ADD. 1:00 ($30) AD-IN

ADD: A Sensory Integration Perspective. Koomer, Jane. From AD-IN's Fourth National Conference on ADD. 1:00 ($30) AD-IN

ADHD/ADD from the Student, Parent & Adult Perspectives. Copeland, Edna and Walker, Ronald. This video is part of the Diverse Teaching for Diverse Learning Series. It highlights the difficulties faced by students and parents as they attempt to address the facets of ADD. Includes participant's guide. :45 ($35) Resurgens Press

ADHD in Adulthood: A Clinical Perspective. Robin, Arthur. Explains the symptoms and diagnosis of ADHD in adults and gives intervention and medication strategies. 1:00 ($59) Professional Advancement Seminars

ADHD in Adults. Barkley, Russell. Explains the symptoms and treatment of adult ADHD and how it differs from that of children. Shows the lives of four adults with ADHD. :30 ($95) Guilford Publications

ADHD in the Classroom: Strategies for Teachers. Barkley, Russell. Combines interviews with hands-on demonstrations of techniques for the classroom and strategies for working with the parents and school system. Includes discussion on the legal aspects and obligations. :30 ($95) Guilford Publications

ADHD-What Can We Do? Barkley, Russell. Explains techniques parents and educators can use. It can be rented through Fanlight Productions. :45 ($75) Guilford Publications

ADHD-What Do We Know? Barkley, Russell. Describes ADHD, the problems of children with ADD, and the medical treatment. Interviews parents, teachers, and children. It can be rented through Fanlight Productions. :35 ($75) Guilford Publications

All About ADD. Explains the symptoms of ADD and their effects, causes of ADD, treatment of ADD (counseling, interventions, behavioral management, medication) and ways to predict the child's future. 3:15 ($50) Child Management

Answers to ADD: The School Success Tool Kit. Taylor, John. Techniques and practical solutions for parents and teachers. Includes advice on homework, organization, note taking and the "Three R's." 1:42 ($39.95) Sun Media

Approaching College for Students with ADD. This video features for college students with ADD who present their own experiences and address what students need to know before they get to college. It explains the implications of being a college student with ADD. ($30) Pediatric Development Center

Around the Clock: Parenting the Delayed ADD Child. Goodman, Joan and Hoban, Susan. This video is for parents who have children with ADD who are also developmentally delayed. This video shows the lives of two families and the symptoms, coping, and acceptance of the problem. :30 ($150) Guilford

Attention Disorders: The School's Vital Role. Copeland, Edna. This package includes "Understanding ADD: Preschool to Adulthood," (:42), which portrays typical life with ADHD children and adults and discussion of the behavior. It also has "The School's Key Role in ADHD/ADD," (:77), which shows ADD students in the classroom and ways to educate them. Includes Instruction Manual. ($190) Resurgens Press

Barkley, Russell A. Video Series

ADHD: What Do We Know? (1992). :36 VHS Cat. #2971.
ADHD: What Can We Do? (1992). :37 VHS Cat. #2972.
ADHD in the Classroom: Strategies for Teachers. (1994). :36 VHS Cat. #2985.
ADHD in Adults. (1994). :36 VHS Cat. #2986.

Behavior Management of ADD. Barkley, Russell. Clinical discussion of ADD at AD-IN's First National Conference on ADD. 1:00 ($30) AD-IN

Causes of ADD. Copeland, Edna and Walker, Ronald. This video is part of the Diverse Teaching for Diverse Learning Series. It addresses the neurological basis of ADD and the generic, social, emotional, educational, and environmental risk factors. Includes participant's guide. :45 ($35) Resurgens Press

Characteristics of ADD. Copeland, Edna and Walker, Ronald. This video is part of the Diverse Teaching for Diverse Learning Series. It provides an overview of ADD. Includes participant's guide. :45 ($35) Resurgens Press

Classroom Interventions for Behaviorally and Socially Difficult Students. Copeland, Edna and Walker, Ronald. This video is part of the Diverse Teaching for Diverse Learning Series. It addresses the motivations of control, attitudes toward authority and principles and strategies that work. Includes participant's guide. :45 ($35) Resurgens Press

Classroom Organization and Structure. Copeland, Edna and Walker, Ronald. This video is part of the Diverse Teaching for Diverse Learning Series. How to maximize learning and cooperation through the environment. Includes participant's guide. :45 ($35) Resurgens Press

Developing Coping Skills: A Workshop for Adults with ADD. Schultz, Jerome. Workshop at AD-IN's Fourth National Conference on ADD. 1:00 ($30) AD-IN

Dialogue with Dr. Weiss. Weiss, Gabrielle. Discussion with an expert on adults with ADD at AD-IN's Fourth National Conference on ADD. 1:00 ($30) AD-IN

Educating Inattentive Children. Goldstein, Sam and Michael. Provides educators with information to identify and evaluate classroom problems and practical guidelines to educate students with ADD. 2 hours ($90) ADD WareHouse

An Educator's Perspective on ADD: If You Don't Stand Up for *Something*, You'll Fall For Almost *Anything*. Lavole, Richard. Lecture at AD-IN's Second National Conference on ADD. 1:00 ($30) AD-IN

The Effectiveness of Dealing with the Entire Family When Treating the ADD Child. Weaver, Robert. Lecture at AD-IN's Fourth National Conference on ADD. 1:00 ($30) AD-IN

How Parents Can Develop a Better Relationship With Their ADD Children and Improve Their Self-Esteem. Weaver, Robert. Lecture on the role of parents from AD-IN's Second National Conference on ADD. 1:00 ($30) AD-IN

Inclusion of Children and Youth with Attention Deficit Disorder. Buehler, Bruce and Evans, Joseph. Video focuses on causes, diagnosis, and treatment for ADHD as well as home-based and school interventions. :42 ($99) National Professional Resources

It's Just Attention Disorder: A Video for Kids. Goldstein, Sam and Michael. MTV style video designed to help the child learn about his problem and its treatment. Includes manual and study guide. ($90) ADD WareHouse

Jumpin' Johnny Get Back to Work: The Video. Gordon, Michael. Based on the Children's picture book, this animated video tells the story of a boy with ADHD. :30 ($45) ADD Warehouse

Language and Literacy Across the Elementary School Curriculum: What to Look For, What to Do. Franciscan Children's Hospital Speech and Language Pathologists. A panel discussion on elementary school. 1:00 ($30) AD-IN

Living with ADD. Efforts to support families with ADD children. The parents on the tape are all members of the ADD group. :55 ($10 rent) LDA

Medical Interventions for ADHD and the School's Vital Role in Medical Management. Copeland, Edna and Walker, Ronald. This video is part of the Diverse Teaching for Diverse Learning Series. It provides an overview of current medical treatments. Includes participant's guide. :45 ($35) Resurgens Press

Meeting the Attentional and Emotional Needs of Students. Copeland, Edna and Walker, Ronald. This video is part of the Diverse Teaching for Diverse Learning Series. It shows how teachers and parents can meet the needs of students with ADD. Includes participant's guide. :45 ($35) Resurgens Press

Modifying the Classroom for Success: Practical Techniques for Working with the Child Who Has ADD. Schultz, Jerome. In-service training for teachers at AD-IN's Fourth National Conference on ADD. 1:00 ($30) AD-IN

Multisensory Strategies for Teaching Language Arts. Copeland, Edna and Walker, Ronald. This video is part of the Diverse Teaching for Diverse Learning Series. Discusses effective multisensory approaches and accommodations in testing procedures. Includes participant's guide. :45 ($35) Resurgens Press

Multisensory Teaching Methods for Mathematics. Copeland, Edna and Walker, Ronald. This video is part of the Diverse Teaching Learning Series. Discusses effective multisensory approaches and accommodations in testing procedures. Includes participant's guide. :45 ($35) Resurgens Press

Neurological Issues for ADD/LD. DeBassio, William. Lecture at AD-IN's Fourth National Conference on ADD. 1:00 ($30) AD-IN

Partner Systems for Optimum Learning of Content and Values. Copeland, Edna and Walker, Ronald. This video is part of the Diverse Teaching for Diverse Learning Series. It discusses how cooperative learning can help ADD students. Includes participant's guide. :45 ($35) Resurgens Press

Peer Support: ADHD/ADD Teens Speakout! Lambert, Laura. Teens speak out with other teens and share thoughts on self management, communication, medication, ability, success. Shows how to form a peer support group. 1:20 ($40) Starbase One

Positive Teacher Strategies to Focus Students and Enhance Attention. Copeland, Edna and Walker, Ronald. This video is part of the Diverse Teaching for Diverse Learning Series. It provides positive reinforcement strategies. Includes participant's guide. :45 ($35) Resurgens Press

Principles of Behavior Management for Optimum Student Performance and Esteem. Copeland, Edna and Walker, Ronald. This video is part of the Diverse Teaching for Diverse Learning Series. It provides an overview of behavior management for emotional and educational behavior. Includes participant's guide. :45 ($35) Resurgens Press

Strategy Instruction: The Missing Link for the ADD/LD Student. Amico, Kathleen. Lecture from AD-IN's Fourth National Conference on ADD. 1:00 ($30) AD-IN

Success Strategies for ADD Adults. Melear, Larry. Health educator shares tips for family and career based on his own experience as a person with ADD and information from studies of ADD adults. Audio tape only. ($14.95) Attention Deficit Resource Center

Understanding Attention Deficit Disorder. Epstein, Simon. A general introduction to ADHD including history, symptoms, methods of diagnosis, special education, medication, therapy, and self-esteem. :45 ($23.50) CACLD

Understanding Hyperactivity. Psychiatric Support Services, Inc. Explains the symptoms and consequences of hyperactivity through the experiences of one family. :25 ($40) ADD Warehouse

The Video SOS: Help for Parents. Clark, Lynn. Video helps teach parents skills for child management. Includes book, handouts and Leader's Guide. 1:07 ($150) Parents Press

Why Won't My Child Pay Attention? Goldstein, Sam and Michael. Familiarizes parents with ADD behaviors and the problems they can cause. It explains the effects these behaviors have on children and provides guidelines to help parents and professionals. 1:16 ($30) ADDA

Organizations and Publishers

ADD WareHouse (ADDW)
300 NW 70th Ave.
Plantation, FL 33317
(800) 233-9273

The ADDed Line
3320 Creek Hollow Drive
Marietta, GA 30062
(800) 982-4028

ADDult News: An Adult Newsletter
Mary Jane Johnson, Editor
2620 Ivy Place
Toledo, OH 43613

AD-IN
475 Hillside Ave.
Needham, MA 02194
(617) 455-9895

American Academy of Pediatrics
Department C
141 Northwest Point Blvd.
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Elk Grove Village, IL 60009-0927
(708) 228-5097

American Psychiatric Press
1400 K Street, NW
Washington, D.C. 20005
(800) 368-5777

Attention Deficit Disorder Association (ADDA)
8091 South Ireland Way
Aurora, CO 80016
(303) 690-7548
(800) 487-2282 Support Group Referral Line

Attention Please
Lois Ludwig
2106 3rd Ave. N
Seattle, WA 98109-2304

Attention Deficit Resource Center
P.O. Box 71223
Marietta, GA 30007-1223
(800) 537-3784

Barron's Educational Series
P.O. Box 8040
250 Wireless Blvd.
Hauppauge, NY 11788
(516) 434-3311

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(800) 447-BOOK

Brunner/Mazel Publishers
19 Union Square West
New York, NY 10003
(800) 825-3089
(212) 924-3344

Calliope Books
2115 ChadbourneAve.
Madison, WI 53705

Center for Effective Living
2220 Boynton St., Ste. C
Fairfield, CA 94533
(800) 793-9249

Chesapeake Institute
2030 M Street, NW
Suite 800
Washington, D.C. 20036

Chesapeake Psychological Services
5041-A Backlick Road
Annandale, VA 22003
(703) 642-6697
Not affiliated with the Chesapeake Institute

Child Management
507 Thornhill Drive
Carol Stream, IL 60188
(800) 442-4453

Children with Attention Deficit Disorders
(CH.A.D.D.)
499 NW 70th Ave., Suite 308
Plantation, FL 33317
(305) 587-3700

Connecticut Association for Children with Learning Disabilities (CACLD)
18 Marshall Street
South Norwalk, CT 06854
(203) 838-5010

Council of Administrators of Special Education, Inc.
615 16th St., NW
Albuquerque, NM 87104
(505) 243-7622

Council for Exceptional Children (CEC)
1920 Association Drive
Reston, VA 22091
(703) 264-9474

Educational Resources
19900 Ten Mile Road
St. Clair Shores, MI 48081
(313) 776-2949

Educators Publishing Service
75 Multon St.
Cambridge, MA 02138
(617) 547-6706

ERIC Clearinghouse for Handicapped and Gifted Children
Council for Exceptional Children
1920 Association Drive
Reston, VA 22091
(703) 264-9474

Fanlight Productions
47 Halifax Street
Boston, MA 02130
(617) 524-0980

GSI Publications
P.O. Box 746
DeWitt, NY 13214
(315) 446-4849

Guilford Publications, Inc.
72 Spring Street
New York, NY 10012
(800) 365-7006
E-mail: info@guilford.com

HADD
4231 Colonial Ave. SW
Bldg. E, Suite 6
Roanoke, VA 24018

Impact Publications
300 NW 70th Ave.
Plantation, FL 33317
(305) 792-8944

Insight Books
Plenum Publishing Corporation
233 Spring Street
New York, NY 10013
(800) 221-9369

JKL Communications
1016 16th St., NW
Suite 700
Washington, D.C. 20036
(202) 223-5097

John Wiley & Sons
Eastern Distribution Center
1 Wiley Drive
Somerset, NJ 08873
(908) 469-4400

Learning Disabilities Association of America (LDA)
4156 Library Road
Pittsburgh, PA 15234-1349
(412) 341-1515

Learning Disabilities Project
Interstate Research Association
26 Jones Branch
Suite 1100
McLean, VA 22102

Magination Press
Dept. QC
19 Union Square West
New York, NY 10003
(800) 825-3089

Michigan Products Inc.
P.O. Box 24155
Lansing, MI 48909-4155
(800) 444-1773

National Association of School Psychologists
8455 Colesville Road
Suite 1000
Silver Spring, MD 20910
(301) 608-2514

National Information Center for Children and Youth
With Disabilities (NICHCY)
P.O. Box 1492
Washington, D.C. 20013
(800) 999-5599

National Professional Resources, Inc.
25 South Regent St.
Port Chester, NY 10573
(800) 453-7461

Parents Press
P.O. Box 2180
Bowling Green, KY 42102
(502) 842-4571

Pediatric Development Center
3268 Arcadia Place, NW
Washington, D.C. 20015

Phi Delta Kappa
Educational Foundation
408 N. Union
P.O. Box 789
Bloomington, IN 47402-0789
(800) 766-1156

Professional Advancement Seminars
One Did Street
Worcester, MA 01609
(508) 792-2408

Professional Group for ADD and Related Disorders
(PGARD)
28 Fairview Road
Scarsdale, NY 10583
(914) 723-0118

Research Press
2612 North Mattis Ave.
Champaign, IL 61821
(217) 352-3273

Resurgens Press, Inc.
1770 Old Spring House Lane, Suite 111
Atlanta, GA 30338
(800) 526-5952

Sopris West
1140 Boston Avenue
Longmont, CO 80501
(303) 651-2829

Starbase One Ltd.
P.O. Box 2217
Jasper, OR 97438

Strategies
1633 Babcock Suite 231
San Antonio, TX 78229

St. Martin's Press
Publishers Book & Audio
P.O. Box 070059
Staten Island, NY 10307
(800) 288-2131

Sun Media
1095 25th St. SE, Suite 107
Salem, OR 97301
(800) VIP-1ADD

Charles Thomas, Publisher
2600 South First Street
Springfield, IL 62794-9265
(800) 358-8980
(217) 789-8980

Tyrell & Jerem Press
P.O. Box 20089
Cincinnati, OH 45220
(800) 622-6611

Underwood-Miller, Inc.
708 Westover Drive
Lancaster, PA 17601

Verbal Images Press
19 Fox Hill Drive
Fairport, NY 14450
(716) 377-3807

Woodbine House
5615 Fishers Lane
Rockville, MD 20852
(301) 468-8800

Internet

INTERNET LISTSERVs:

To subscribe (be added) to a listserv:
Send an e-mail message to the listserv address.
Leave the subject line blank.
In the body of the message, type ONLY the following:

SUBSCRIBE [list name] yourfirstname yourlastname

For example: SUBSCRIBE ADA-LAW Mary Smith

List Name	Subscription Address	Post Messages To
ADD-PARENTS	majordomo@mv.mv.com	add-parents@mv.mv.com
ADDULT	listserv@sjuvm.stjohns.edu	addult@sjuvm.stjohns.edu
LD-LIST	id-list-request@east.pima.edu	id-list@east.pima.edu

Other Internet Resources:

FTP Sites: ftp://com13.netcom/pub/lds/add/add.faq
ftp://mcs.com:/mcsnet.users/falcon/add
ftp.netcom:/pub/lds/add

Newsgroups: alt.support.attn-deficit

If you subscribe to America Online (AOL), there are several weekly ADD conferences in the issues in Mental Health Forum (use the keyword IMH). The schedule (listed in EASTERN time):

ADDults Only	Tuesday, midnight
ADD partners	Saturday, 8 PM
Parents of ADD Kids:	Wednesday, 8 PM
ADD Support:	Tuesday, 7 PM
ADD Support:	Wednesday, 2 PM
ADD Parents:	Thursday, 2 PM

If you subscribe to CompuServe, there is an ADD Forum (GO ADD), a DISABILITIES FORUM (GO DISABILITIES), and an EDUCATION Forum (GO EDFORUM) that address special needs.

Assessment

ADHD in the Schools: Assessment and Intervention Strategies. DuPaul, G.J., and Stoner, G. (1994). New York: Guilford Press

Attention Deficit Disorders Evaluation Scale: School Version Rating Form. McCarney, Stephen B. (1989). Columbia, MO: Hawthorne

Attention Deficit Hyperactivity Disorder: A Handbook for Diagnosis and Treatment. Barkley, R.A. (Ed.). (1990). New York: Guilford Press

Childhood History Form for Attention Disorders. Goldstein, Sam and Michael. ADD WareHouse

The Continuous Performance Test (CPT) Computer Program 3.11. Conners, C. Keith. ADD WareHouse

Functional Assessment of the Academic Environment. Lentz, F.E. and Shapiro, E.S. (1986). School Psychology Review, 15, pp. 346-357.

Multimethod Assessment of Attention-Deficit Hyperactivity Disorder: The Diagnostic Utility of Clinic-based Tests. DuPaul, G.J., Anastopoulos, A.D., Shelton, T.L., Guevremont, D.C., and Metevia, L. (1992). *Journal of Clinical Child Psychology*, 21, pp. 394-402.

The School Psychologist as Manager of Programming for ADHD. Power, T.J., Atkins, M.S., Osborne, M.L., and Blum, N.J. (1994). School Psychology Review, 23, pp. 279-291.

Social Skills and Peer Relationship Training. Guevremont, D.C. (1990). In Barkley, R.A. (Ed.), Attention Deficit Hyperactivity Disorder: A Handbook for Diagnosis and Treatment. Pages 540-572. New York: Guilford Press

T.O.V.A. 6.08 Test of Variables of Attention. Universal Attention Disorders, Inc. ADD WareHouse

Walker-McConnell Scale of Social Competence and School Adjustment. Walker, Hill M. And McConnell, Scott R. ADD WareHouse

Resources Recommended by Idaho Educators

The Attention Deficit Disorders Evaluation Scale: Home Version Technical Manual. McCarney, Stephen B. (1989). Columbia, MO: Hawthorne.

How to Reach and Teach ADD/ADHD Children. Rief, Sandra F. (1993). West Nyack, NY: The Center for Applied Research in Education.

Hyperactivity and Attention Disorders in Children. Baren, Martin. (1995). San Ramon, CA: HIN, Inc., The Health Information Network.

The Parent's Guide to Attention Deficit Disorders. McCarney, Stephen B. And Bauer, Angela Marie. (1990). Columbia, MO: Hawthorne.

Videos

Russell A. Barkley's Video Series

ADHD: What Do We Know? (1992). :36 VHS Cat. #2971.

ADHD: What Can We Do? (1992). :37 VHS Cat. #2972.

ADHD in the Classroom: Strategies for Teachers. (1994). :36 VHS Cat. #2985.

ADHD in Adults. (1994). VHS Cat. #2986.